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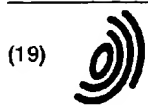
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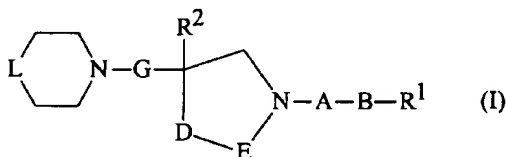
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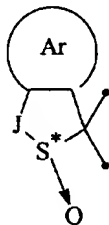
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(54) Azaheterocyclic compounds having tachykinin receptor antagonist activity; Nk1 and NK2

(57) Compounds of formula (I):



and the quaternary ammonium derivatives thereof, especially compounds in which L represents a group



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have tachykinin receptor antagonist activity and exhibit an activity against both the NK₁ receptors and the NK₂ receptors.

Description

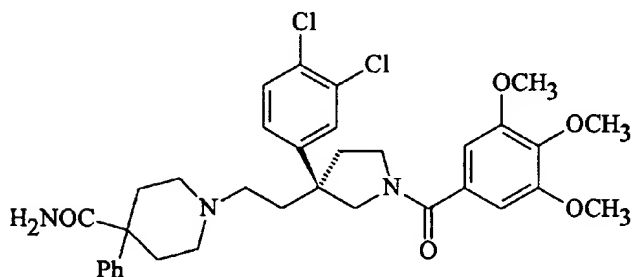
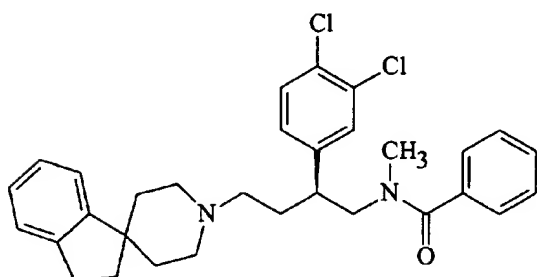
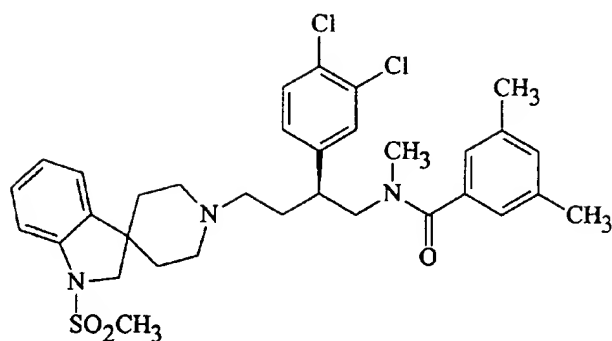
The present invention relates to a series of new heterocyclic compounds having tachykinin receptor antagonist activity. It also provides methods and compositions using them for therapeutic and prophylactic purposes, as well as processes for their preparation and intermediates used in their preparation.

The presence in the mammalian body of the various forms of tachykinin is associated with a variety of diseases and disorders, including respiratory diseases, such as asthma, bronchitis, rhinitis and coughs; allergies; ophthalmic inflammatory diseases, such as conjunctivitis and spring catarrh; dermal diseases, such as contact dermatitis, atopic dermatosis and urticaria; inflammatory diseases, such as rheumatism and arthrosis deformans; pain, such as migraine, headache and toothache; central nervous system diseases, such as anxiety and Alzheimer's disease; and gastrointestinal diseases, such as colitis; and cystitis; and many others. Inhibition of the activity of these forms of tachykinin will, therefore, result in a new therapy and/or prophylaxis for these diseases and disorders.

The compounds of the present invention exhibit antagonism generally to tachykinin receptors, but especially to the receptors for substance P (which receptors are generally referred to as "neurokinin 1 receptors" - NK₁) and the receptors for neurokinin A (which receptors are generally referred to as "neurokinin 2 receptors" - NK₂). It is a particular advantage of the compounds of the present invention that they exhibit antagonism to both of these receptors, a so-called "dual effect".

Compounds which are structurally close to those of the present invention are disclosed in FR 2729952, FR 2729953 and FR 2729954. However, these are selective for the NK₁ receptors and none of these compounds exhibits the dual effects of the compounds of the present invention.

A few low molecular weight non-peptide compounds are known to exhibit antagonism to both of these receptors, for example some of the compounds disclosed in WO 9429309 (1994), WO 9417045 (1994), WO 9426735 (1994) and WO 9528389 (1995) exhibit such an effect. Typical examples of compounds which are disclosed in these documents are:

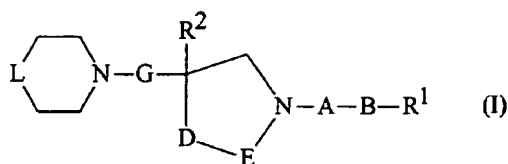


45 However, oral absorption of these compounds is poor. As a result, these prior art compounds cannot be administered by mouth and must be administered parenterally, for example by injection. It is well known in the medical field that administration of any drug by injection is undesirable, as either the patient must be trained (and some patients are inherently untrainable) or the drug must be administered by experienced staff, which is expensive and inconvenient both for the patient and the staff.

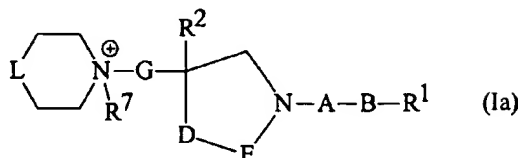
50 There is, therefore, a need for a new tachykinin receptor antagonist which exhibits the aforementioned dual effects, and which has good oral absorption and a low toxicity.

We have now discovered a series of new compounds which exhibit an activity against the NK₁ receptors which is at least equal to that of the prior art compounds showing a dual effect and which unexpectedly exhibit a much stronger activity against the NK₂ receptors.

55 The compounds of the present invention are those compounds of formula (I):



and the quaternary ammonium derivative thereof of formula (Ia):



in which:

25 R^1 and R^2 are the same as or different from each other, and each represents a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α , defined below;

A represents a methylene group, a carbonyl group or a sulphonyl group;

30 B represents a single bond between the groups represented by A and R^1 , an alkylene group having from 1 to 4 carbon atoms or an alkenylene group having from 2 to 4 carbon atoms;

D represents an oxygen or sulphur atom;

35 E represents an alkylene group having from 1 to 6 carbon atoms, a haloalkylene group having from 1 to 6 carbon atoms, a cycloalkane-1,1-diyl group having from 3 to 6 carbon atoms, a cycloalkane-1,1-diylmethyl group having from 3 to 6 carbon atoms in the cycloalkane part, or a cycloalkane-1,1-diyl(methyl) group having from 3 to 6 carbon atoms in the cycloalkane part;

40 G represents an alkylene group having from 1 to 4 carbon atoms or an alkenylene group having from 2 to 4 carbon atoms;

45 L represents a group of formula $-N(R^3)-$ or a group of formula $-C(R^4)(R^5)-$

in which R^3 represents a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α , defined below,

50 R^4 represents a hydrogen atom, a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α , defined below, and

55 R^5 represents a group of formula $-CO-R^6$, an alkyl group having from 1 to 6 carbon atoms, an alkoxy group having from 1 to 6 carbon atoms, an amino group, an acylamino group, an alkyl group which has from 1 to 6 carbon atoms and which is substituted by an acylamino group, an acylamino group whose nitrogen atom is substituted with an alkyl group having from 1 to 6 carbon atoms, a hydroxy group, a hydroxyalkyl group having from 1 to 6 carbon atoms, an alkoxyalkyl group in which the alkoxy and alkyl parts each has from 1 to 6 carbon atoms, or an aralkoxyalkyl group having from 1 to 6 carbon atoms in the oxyalkyl part, and in which the aralkyl part is

an alkyl group which has from 1 to 4 carbon atoms and which is substituted by from 1 to 3 carbocyclic aryl groups which are unsubstituted or which are substituted by at least one substituent preferably selected from substituents α , defined below,

in which R^6 represents an alkyl group having from 1 to 6 carbon atoms, an alkoxy group having from 1 to 6 carbon atoms, a group of formula - NR^aR^b , a carbocyclic aryl group or a heterocyclic group, said aryl group and said heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α , defined below

in which R^a represents a hydrogen atom, an alkyl group having from 1 to 6 carbon atoms, an alkoxy group having from 1 to 6 carbon atoms, an aliphatic carboxylic acyl group having from 1 to 6 carbon atoms, an alkanesulphonyl group having from 1 to 6 carbon atoms, a haloalkanesulphonyl group having from 1 to 6 carbon atoms, a cycloalkyl group having from 3 to 8 carbon atoms, a carbocyclic aryl group which is unsubstituted or which is substituted by at least one substituent preferably selected from substituents α , defined below, or an aralkyl group in which an alkyl group having from 1 to 4 carbon atoms is substituted by from 1 to 3 carbocyclic aryl groups as defined above, and

R^b represents a hydrogen atom, an alkyl group having from 1 to 6 carbon atoms, an alkoxy group having from 1 to 6 carbon atoms, an aliphatic carboxylic acyl group having from 1 to 6 carbon atoms, an alkanesulphonyl group having from 1 to 6 carbon atoms, a haloalkanesulphonyl group having from 1 to 6 carbon atoms, a cycloalkyl group having from 3 to 8 carbon atoms, a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α , defined below, or an aralkyl group in which an alkyl group having from 1 to 4 carbon atoms is substituted by from 1 to 3 carbocyclic aryl groups as defined above,

or

R^a and R^b together with the nitrogen atom to which they are attached represent a nitrogen-containing heterocyclic group,

or

R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group having from 5 to 10 ring atoms, said group being unsubstituted or being substituted by at least one substituent selected from substituents β , defined below, and said heterocyclic group having a single nitrogen and/or oxygen and/or sulphur hetero-atom, or R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group as defined above which is fused to a carbocyclic aryl group or to an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α , defined below;

R^7 represents an alkyl group having from 1 to 6 carbon atoms; and

said substituents α are selected from halogen atoms, alkyl groups having from 1 to 6 carbon atoms, haloalkyl groups having from 1 to 6 carbon atoms, alkoxy groups having from 1 to 6 carbon atoms, aliphatic carboxylic acyl groups having from 1 to 6 carbon atoms, alkanesulphonyl groups having from 1 to 6 carbon atoms, haloalkanesulphonyl groups having from 1 to 6 carbon atoms, hydroxy groups, carboxy groups, alkoxycarbonyl groups having from 1 to 6 carbon atoms in the alkoxy part, acylamino groups having from 1 to 6 carbon atoms, alkanesulphonylamino groups having from 1 to 6 carbon atoms, haloalkanesulphonylamino groups having from 1 to 6 carbon atoms, amino groups, cyano groups, and alkylene groups having from 1 to 8 carbon atoms (to form a cycloalkyl group fused with the aryl or heterocyclic ring);

said substituents β are:

when substituting a carbon atom, oxo groups,

when substituting a nitrogen atom, selected from aliphatic acyl groups, alkanesulphonyl groups having from 1 to 6 carbon atoms, alkyl groups having from 1 to 6 carbon atoms which are unsubstituted or are substituted by at least one substituent preferably selected from substituents γ , defined below, carbocyclic aryl groups which are unsubstituted or are substituted by at least one substituent preferably selected from

substituents α , defined above, and aralkyl groups in which an alkyl group having from 1 to 4 carbon atoms is substituted by from 1 to 3 carbocyclic aryl groups as defined above,

and, when substituting a sulphur atom, one or two oxygen atoms to form a sulfoxide or sulphone group;
and

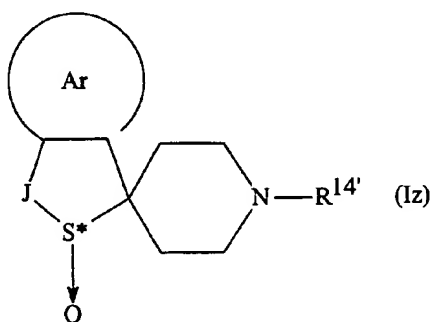
said substituents γ are selected from halogen atoms, alkoxy groups having from 1 to 6 carbon atoms, aliphatic carboxylic acyl groups having from 1 to 6 carbon atoms, alkanesulphonyl groups having from 1 to 6 carbon atoms, haloalkanesulphonyl groups having from 1 to 6 carbon atoms, hydroxy groups, carboxy groups, alkoxy-carbonyl groups having from 1 to 6 carbon atoms in the alkoxy part, acylamino groups having from 1 to 6 carbon atoms, amino groups, and cyano groups;

and pharmaceutically acceptable salts and esters thereof.

The invention also provides a composition for the treatment or prophylaxis of central nervous system diseases, neurodegenerative diseases, respiratory diseases, inflammatory diseases, allergies, hypersensitivity diseases, ophthalmological diseases, skin diseases, addictions, somatic diseases caused by stress, sympathetic reflex dystrophy, dysthymia, undesirable immune reactions, diseases relating to immunopotential, digestive diseases, emesis, urinary bladder functional diseases, eosinophilia, diseases caused by abnormal blood flow, and pain, which comprises an effective amount of a compound of formula (I) or (Ia), or a pharmaceutically acceptable salt or ester thereof in admixture with a pharmaceutically acceptable carrier or diluent.

The invention still further provides the use of the compounds of the present invention for the manufacture of a medicament for the treatment or prophylaxis of a disease or disorder selected from central nervous system diseases, neurodegenerative diseases, respiratory diseases, inflammatory diseases, allergies, hypersensitivity diseases, ophthalmological diseases, skin diseases, addictions, somatic diseases caused by stress, sympathetic reflex dystrophy, dysthymia, undesirable immune reactions, diseases relating to immunopotential, digestive diseases, emesis, urinary bladder functional diseases, eosinophilia, diseases caused by abnormal blood flow, and pain.

The invention also provides a compound of formula (Iz):



in which:

J represents an alkylene group having from 1 to 6 carbon atoms;

Ar represents a carbocyclic aryl group or aromatic heterocyclic group fused to the ring containing J and S, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α , defined above;

$R^{14'}$ represents a hydrogen atom or an amino-protecting group; and

$S^* \rightarrow O$ represents a sulfoxide group in which the sulphur atom is in the S -configuration.

Where R^1 , R^2 , R^3 , R^4 , R^5 , R^a , R^b , Ar or substituent β represents a carbocyclic aryl group, this has from 5 to 14, preferably from 6 to 14, more preferably from 6 to 10, and most preferably 6 or 10, ring carbon atoms. The group may

have a single aromatic ring or it may have two or more fused aromatic rings. The group may be unsubstituted or it may be substituted by one or more of substituents α , defined above and exemplified below. There is no particular restriction on the number of substituents, except such as may be imposed by the number of substitutable positions, and sometimes by steric constraints. However, in general, where the group is substituted, we prefer from 1 to 3 substituents. Examples of the unsubstituted groups include the phenyl, 1-naphthyl, 2-naphthyl, indenyl, phenanthrenyl and anthracenyl groups, of which the phenyl and naphthyl groups are preferred, the phenyl group being most preferred.

Examples of substituted groups include the 2-methoxyphenyl, 3-methoxyphenyl, 4-methoxyphenyl, 2,4-dimethoxyphenyl, 2,3-dimethoxyphenyl, 2,5-dimethoxyphenyl, 3,4-dimethoxyphenyl, 3,5-dimethoxyphenyl, 2,6-dimethoxyphenyl, 3,4,5-trimethoxyphenyl, 2,4,5-trimethoxyphenyl, 2,3,4-trimethoxyphenyl, 2,3,5-trimethoxyphenyl, 2,3,6-trimethoxyphenyl, 2,4,6-trimethoxyphenyl, 2-ethoxyphenyl, 3-ethoxyphenyl, 4-ethoxyphenyl, 2-isopropoxyphenyl, 3-isopropoxyphenyl, 4-isopropoxyphenyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, 2,4-dimethylphenyl, 2,3-dimethylphenyl, 2,5-dimethylphenyl, 3,4-dimethylphenyl, 3,5-dimethylphenyl, 2,6-dimethylphenyl, 3,4,5-trimethylphenyl, 2,4,5-trimethylphenyl, 2,3,4-trimethylphenyl, 2,3,5-trimethylphenyl, 2,3,6-trimethylphenyl, 2,4,6-trimethylphenyl, 2-chlorophenyl, 3-chlorophenyl, 4-chlorophenyl, 2,4-dichlorophenyl, 2,3-dichlorophenyl, 2,5-dichlorophenyl, 3,4-dichlorophenyl, 3,5-dichlorophenyl, 2,6-dichlorophenyl, 3,4,5-trichlorophenyl, 2,4,5-trichlorophenyl, 2,3,4-trichlorophenyl, 2,3,5-trichlorophenyl, 2,3,6-trichlorophenyl, 2,4,6-trichlorophenyl, 2-fluorophenyl, 3-fluorophenyl, 4-fluorophenyl, 2,4-difluorophenyl, 2,3-difluorophenyl, 3,4-difluorophenyl, 3,5-difluorophenyl, 2,6-difluorophenyl, 3,4,5-trifluorophenyl, 2,4,5-trifluorophenyl, 2-trifluoromethylphenyl, 3-trifluoromethylphenyl, 4-trifluoromethylphenyl, 2,4-bis(trifluoromethyl)phenyl, 2,3-bis(trifluoromethyl)phenyl, 3,4-bis(trifluoromethyl)phenyl, 3,5-bis(trifluoromethyl)phenyl, 2,6-bis(trifluoromethyl)phenyl, 3,4,5-tris(trifluoromethyl)phenyl, 2,4,5-tris(trifluoromethyl)phenyl, 2-acetamidophenyl, 3-acetamidophenyl, 4-acetamidophenyl, 2-methoxycarbonylphenyl, 3-methoxycarbonylphenyl, and 4-methoxycarbonylphenyl groups.

Where substituent α is an alkylene group having from 1 to 8 carbon atoms, this forms, together with the two carbon atoms of the aryl group to which it is attached, a cycloalkyl group fused to the aryl group. An example of such a fused ring group is the indanyl group.

Where R^1 , R^2 , R^3 , R^4 , R^5 , R^6 , or Ar represents an aromatic heterocyclic group, this is a single ring which has from 5 to 7 ring atoms, of which from 1 to 3 atoms are nitrogen and/or oxygen and/or sulphur hetero-atoms, or is a fused ring system in which at least one of the rings is an aromatic heterocyclic group as defined above and the or each other ring is such an aromatic heterocyclic group or a carbocyclic aryl group as defined above. Where there are 3 hetero atoms in the aromatic heterocyclic group, these are preferably all nitrogen atoms or one or two are nitrogen atoms and, correspondingly, two or one are oxygen and/or sulphur atoms.

Examples of such aromatic heterocyclic groups include the furyl, thienyl, pyrrolyl, azepinyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, 1,2,3-oxadiazolyl, triazolyl, tetrazolyl, thiadiazolyl, pyranyl, pyridyl, pyridazinyl, pyrimidinyl and pyrazinyl groups. Preferred groups are 5- to 7-membered aromatic heterocyclic groups which have at least one nitrogen atom and optionally one additional nitrogen, oxygen or sulphur atom. Examples of such groups include the pyrrolyl, azepinyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, 1,2,3-oxadiazolyl, triazolyl, tetrazolyl, thiadiazolyl, pyridyl, pyridazinyl, pyrimidinyl and pyrazinyl groups. Of these, the pyridyl, imidazolyl, oxazolyl, pyrazinyl and thiazolyl groups are more preferred.

Such an aromatic heterocyclic group may form a fused ring with another cyclic group, and examples of such fused ring systems include the indolyl, benzofuryl, benzothieryl, benzoxazolyl, benzoimidazolyl, isoquinolyl, quinolyl and quinolaxyl groups.

These aromatic heterocyclic groups may be unsubstituted or they may be substituted by one or more of substituents α , defined above and exemplified below. There is no particular restriction on the number of substituents, except such as may be imposed by the number of substitutable positions, and sometimes by steric constraints. However, in general, where the group is substituted, we prefer from 1 to 3 substituents.

Alternatively, R^6 may represent a non-aromatic (preferably saturated) heterocyclic group, this may have from 5 to 7 ring atoms, of which from 1 to 3 may be nitrogen and/or oxygen and/or sulphur hetero-atoms, at least one preferably being nitrogen. Examples of such groups include the pyrrolidinyl, piperidinyl, piperazinyl, N-methylpiperazinyl, morpholinyl, thiomorpholinyl, oxazolidinyl, thiazolidinyl, diazolidinyl, oxolanyl, thiolanyl and perhydropyridyl groups.

Where B or G represents an alkylene group having from 1 to 4 carbon atoms, this may be a straight or branched chain group having from 1 to 4 carbon atoms, and examples include the methylene, methylmethylene, ethylene, propylene, trimethylene, tetramethylene, 1-methyltrimethylene, 2-methyltrimethylene and 3-methyltrimethylene groups, of which we prefer the straight or branched chain alkylene groups having from 1 to 3 carbon atoms, more preferably the straight or branched chain alkylene groups having 2 or 3 carbon atoms, and most preferably the ethylene or trimethylene group.

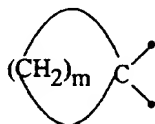
Where B or G represents an alkenylene group having from 2 to 4 carbon atoms, this may be a straight or branched chain group having from 2 to 4 carbon atoms, and examples include the ethenylene, 2-propenylene, 1-methyl-2-propenylene, 2-methyl-2-propenylene, 2-ethyl-2-propenylene and 2-butenylene groups, of which we prefer the ethenylene, 2-propenylene and 3-butenylene groups, more preferably the ethenylene or 2-propynylene group.

Where E or J represents an alkylene group having from 1 to 6 carbon atoms, this may be a straight or branched

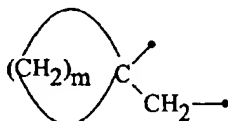
chain group having from 1 to 6 carbon atoms, and examples include the methylene, methylmethylene, ethylene, propylene, trimethylene, tetramethylene, 1-methyltrimethylene, 2-methyltrimethylene, 3-methyltrimethylene, pentamethylene, hexamethylene, 1,1-dimethyltrimethylene, 2,2-dimethyltrimethylene, 1,1-dimethyltetramethylene and 2,2-dimethyltetramethylene groups, of which we prefer the straight or branched chain alkylene groups having from 1 to 4 carbon atoms, more preferably the methylene or ethylene group.

E may also represent a haloalkylene group having from 1 to 6 carbon atoms and substituted by from 1 to 3 halogen atoms, preferably selected from fluorine, chlorine, bromine and iodine atoms, in which the alkylene group may be any of the unsubstituted alkylene groups exemplified above.

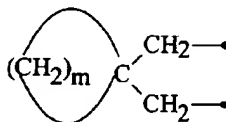
Where E represents a cycloalkane-1,1-diyl group having from 3 to 6 carbon atoms, this is a group of formula



where m is an integer from 2 to 5. Where E represents a cycloalkane-1,1-diylmethyl group having from 3 to 6 carbon atoms in the cycloalkane part, this is a group of formula



in which m is as defined above. Where E represents a cycloalkane-1,1-di(ylmethyl) group having from 3 to 6 carbon atoms in the cycloalkane part, this is a group of formula



in which m is as defined above.

Examples of these groups include the cyclopropane-1,1-diyl, cyclobutane-1,1-diyl, cyclopentane-1,1-diyl, cyclohexane-1,1-diyl, cyclopropane-1,1-diylmethyl, cyclobutane-1,1-diylmethyl, cyclopentane-1,1-diylmethyl, cyclohexane-1,1-diylmethyl, cyclopropane-1,1-di(ylmethyl), cyclobutane-1,1-di(ylmethyl), cyclopentane-1,1-di(ylmethyl) and cyclohexane-1,1-di(ylmethyl) groups, of which we prefer the cyclopropane-1,1-diyl, cyclobutane-1,1-diyl, cyclopropane-1,1-diylmethyl and cyclobutane-1,1-diylmethyl groups.

Where R^5 , R^6 , R^7 , R^8 , R^9 , substituent α or substituent β represents an alkyl group having from 1 to 6 carbon atoms, this may be a straight or branched chain alkyl group having from 1 to 6, carbon atoms, and examples include the methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl, t-butyl, pentyl, isopentyl, 2-methylbutyl, neopentyl, 1-ethylpropyl, hexyl, isohexyl, 4-methylpentyl, 3-methylpentyl, 2-methylpentyl, 1-methylpentyl, 3,3-dimethylbutyl, 2,2-dimethylbutyl, 1,1-dimethylbutyl, 1,2-dimethylbutyl, 1,3-dimethylbutyl, 2,3-dimethylbutyl and 2-ethylbutyl groups, preferably straight or branched chain alkyl groups having from 1 to 4 carbon atoms, such as the methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl and t-butyl groups, of which the methyl and ethyl groups are preferred.

Where R^5 , R^6 , R^8 , R^9 , substituent γ or substituent α represents an alkoxy group having from 1 to 6 carbon atoms, this may be a straight or branched chain alkoxy group having from 1 to 6 carbon atoms, and examples include the methoxy, ethoxy, propoxy, isopropoxy, butoxy, isobutoxy, sec-butoxy, t-butoxy, pentyloxy, isopentyloxy, 2-methylbutoxy, neopentyloxy, 1-ethylpropoxy, hexyloxy, isohexyloxy, 4-methylpentyloxy, 3-methylpentyloxy, 2-methylpentyloxy, 1-methylpentyloxy, 3,3-dimethylbutoxy, 2,2-dimethylbutoxy, 1,1-dimethylbutoxy, 1,2-dimethylbutoxy, 1,3-dimethylbutoxy, 2,3-dimethylbutyl and 2-ethylbutyl groups, preferably straight or branched chain alkoxy groups having from 1 to 4 carbon

atoms, such as the methoxy, ethoxy, propoxy, isopropoxy, butoxy, isobutoxy, sec-butoxy and t-butoxy groups, of which the methoxy and ethoxy groups are preferred.

Where R⁵ represents an acylamino group, the acyl part of this group may be selected from a variety of acyl groups well known in the art. For example, it may be:

an aliphatic acyl group, such as an alkanoyl group, preferably having from 1 to 21 carbon atoms, more preferably from 1 to 6 carbon atoms and most preferably from 2 to 6 carbon atoms, for example a formyl, acetyl, propionyl, butyryl, isobutyryl, pivaloyl, valeryl, isovaleryl, octanoyl, nonanoyl, decanoyl, 3-methylnonanoyl, 8-methylnonanoyl, 3-ethyloctanoyl, 3,7-dimethyloctanoyl, undecanoyl, dodecanoyl, tridecanoyl, tetradecanoyl, pentadecanoyl, hexadecanoyl, 1-methylpentadecanoyl, 14-methylpentadecanoyl, 13,13-dimethyltetradecanoyl, heptadecanoyl, 15-methylhexadecanoyl, octadecanoyl, 1-methylheptadecanoyl, nonadecanoyl, icosanoyl or henicosanoyl group;

a haloalkanoyl group, in which the alkanoyl part may be any of the alkanoyl groups exemplified above other than the formyl group, but is preferably a group having from 2 to 6 carbon atoms, and which preferably has from 1 to 3 halogen atoms, for example a chloroacetyl, dichloroacetyl, trichloroacetyl or trifluoroacetyl group;

an alkoxyalkanoyl group in which the alkoxy part has from 1 to 6 carbon atoms and may be any of the alkoxy groups exemplified above in relation to R⁵ etc., and the alkanoyl part may be any of the alkanoyl groups exemplified above other than the formyl group, but is preferably a group having from 2 to 6 carbon atoms, for example a methoxyacetyl group;

an alkenoyl or alkynoyl group, preferably having from 3 to 6 carbon atoms, for example an acryloyl, propioloyl, methacryloyl, crotonoyl, isocrotonoyl or (E)-2-methyl-2-butenoyl group;

an aromatic acyl group, in which the aryl part may be as defined and exemplified above in relation to R¹ etc., for example an unsubstituted arylcarbonyl group, such as a benzoyl, 1-naphthoyl or 2-naphthoyl group;

a halogen-substituted arylcarbonyl group, in which the aryl part may be as defined and exemplified above in relation to R¹ etc., for example a 2-bromobenzoyl or 4-chlorobenzoyl group;

an alkyl-substituted arylcarbonyl group, in which the aryl part may be as defined and exemplified above in relation to R¹ etc. and the alkyl part may be as defined and exemplified above in relation to R⁵ etc., for example a 2,4,6-trimethylbenzoyl or 4-toluoyl group;

an alkoxy-substituted arylcarbonyl group, in which the aryl part may be as defined and exemplified above in relation to R¹ etc. and the alkoxy part may be as defined and exemplified above in relation to R⁵ etc., for example a 4-anisoyl group;

a nitro-substituted arylcarbonyl group, in which the aryl part may be as defined and exemplified above in relation to R¹ etc., for example a 4-nitrobenzoyl or 2-nitrobenzoyl group;

an alkoxy-carbonyl-substituted arylcarbonyl group, in which the aryl part may be as defined and exemplified above in relation to R¹ etc. and the alkoxy part of the alkoxy-carbonyl group may be as defined and exemplified above in relation to R⁵ etc., for example a 2-(methoxycarbonyl)benzoyl group;

an aryl-substituted arylcarbonyl group, in which each aryl part may be as defined and exemplified above in relation to R¹ etc., for example a 4-phenylbenzoyl group;

an alkoxy-carbonyl group having from 1 to 6, preferably from 1 to 4, carbon atoms in the alkoxy part (i.e. a total of from 2 to 7, preferably from 2 to 5, carbon atoms), for example a methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, isopropoxycarbonyl, butoxycarbonyl, isobutoxycarbonyl, sec-butoxycarbonyl, t-butoxycarbonyl, pentyloxycarbonyl, isopentyloxycarbonyl, 2-methylbutoxycarbonyl, neopentyloxycarbonyl, 1-ethylpropoxycarbonyl, hexyloxycarbonyl, isohexyloxycarbonyl, 4-methylpentyloxycarbonyl, 3-methylpentyloxycarbonyl, 2-methylpentyloxycarbonyl, 1-methylpentyloxycarbonyl, 3,3-dimethylbutoxycarbonyl, 2,2-dimethylbutoxycarbonyl, 1,1-dimethylbutoxycarbonyl, 1,2-dimethylbutoxycarbonyl, 1,3-dimethylbutoxycarbonyl, 2,3-dimethylbutoxycarbonyl and 2-ethylbutoxycarbonyl groups, preferably the methoxycarbonyl, ethoxycarbonyl, propoxycarbonyl, isopropoxycarbonyl, butoxycarbonyl, isobutoxycarbonyl, sec-butoxycarbonyl and t-butoxycarbonyl groups, of which the methoxycarbonyl, ethoxycarbonyl, t-butoxycarbonyl and isobutoxycarbonyl groups are preferred;

an alkoxy carbonyl group substituted with a halogen atom or a trialkylsilyl group having from 1 to 6 carbon atoms in each alkyl part, such as the 2,2,2-trichloroethoxycarbonyl or 2-trimethylsilylethoxycarbonyl groups;

an alkenyl carbonyl group having from 2 to 6 carbon atoms in the alkenyl part, such as the vinyl carbonyl and allyl carbonyl groups;

an aralkyl carbonyl group whose aryl ring may be substituted with 1 or 2 alkoxy groups having from 1 to 6 carbon atoms or nitro groups, such as the benzyl carbonyl, phenacyl, 4-methoxybenzyl carbonyl, 3,4-dimethoxybenzyl carbonyl, 2-nitrobenzyl carbonyl and 4-nitrobenzyl carbonyl groups;

an alkanesulphonyl group having from 1 to 6 carbon atoms, such as the methanesulphonyl, ethanesulphonyl and 1-propanesulphonyl groups;

a fluorinated alkanesulphonyl group having from 1 to 6 carbon atoms, such as the trifluoromethanesulphonyl and pentafluoroethanesulphonyl groups;

an arylsulphonyl group in which the aryl part may be as defined and exemplified above in relation to R^1 etc., such as the benzenesulphonyl and *p*-toluenesulphonyl groups.

Of these, we prefer the aliphatic acyl groups, the aromatic acyl groups and the alkanesulphonyl groups.

Where R^5 represents an alkyl group which has from 1 to 6 carbon atoms and which is substituted by an acylamino group, the alkyl part may be any of the alkyl groups defined and exemplified above in relation to R^5 , and the acyl substituent may also be any of the acyl groups defined and exemplified above in relation to R^5 .

Where R^5 represents an acylamino group whose nitrogen atom is substituted with an alkyl group having from 1 to 6 carbon atoms, the acyl substituent may be any of the acyl groups defined and exemplified above in relation to R^5 , and the alkyl part may also be any of the alkyl groups defined and exemplified above in relation to R^5 .

Where R^5 represents a hydroxyalkyl group having from 1 to 6 carbon atoms, this may be any one of the above alkyl groups which is substituted by at least one hydroxy group, for example the hydroxymethyl, hydroxyethyl, hydroxypropyl, hydroxybutyl, hydroxypentyl, or hydroxyhexyl group.

Where R^5 represents an alkoxyalkyl group, the alkoxy and alkyl parts may be independently selected from the corresponding groups defined and exemplified above in relation to R^5 . Examples of such alkoxyalkyl groups include the methoxymethyl, ethoxymethyl, propoxymethyl, isopropoxymethyl, butoxymethyl, isobutoxymethyl, sec-butoxymethyl, t-butoxymethyl, pentyloxymethyl, neopentyloxymethyl, isohexyloxymethyl, hexyloxymethyl, isohexyloxymethyl, methoxyethyl, ethoxyethyl, propoxyethyl, isopropoxyethyl, butoxyethyl, isobutoxyethyl, sec-butoxyethyl, t-butoxyethyl, pentyloxyethyl, isopentyloxyethyl, neopentyloxyethyl, hexyloxyethyl, isohexyloxyethyl, methoxypropyl, ethoxypropyl, propoxypropyl, isopropoxypropyl, butoxypropyl, isobutoxypropyl, sec-butoxypropyl, t-butoxypropyl, pentyloxypropyl, isopentyloxypropyl, neopentyloxypropyl, hexyloxypropyl, isohexyloxypropyl, methoxybutyl, ethoxybutyl, propoxybutyl, isopropoxybutyl, butoxybutyl, isobutoxybutyl, sec-butoxybutyl, t-butoxybutyl, pentyloxybutyl, isopentyloxybutyl, neopentyloxybutyl, hexyloxybutyl, isohexyloxybutyl, methoxypentyl, ethoxypentyl, propoxypentyl, isopropoxypentyl, butoxypentyl, isobutoxypentyl, sec-butoxypentyl, t-butoxypentyl, pentyloxypentyl, isopentyloxypentyl, neopentyloxypentyl, hexyloxypentyl, isohexyloxypentyl, methoxyhexyl, ethoxyhexyl, propoxyhexyl, isopropoxyhexyl, butoxyhexyl, isobutoxyhexyl, sec-butoxyhexyl, t-butoxyhexyl, pentyloxyhexyl, isopentyloxyhexyl, neopentyloxyhexyl, hexyloxyhexyl and isohexyloxyhexyl groups.

Where R^5 represents an aralkyloxyalkyl group, the aralkyl part is an alkyl group which has from 1 to 4 carbon atoms and which is substituted by from 1 to 3 carbocyclic aryl groups which are unsubstituted or which are substituted by at least one substituent preferably selected from substituents α , defined above and exemplified below, and the alkyl part of the oxyalkyl group has from 1 to 6 carbon atoms. The alkyl parts may be any of the alkyl groups exemplified above in relation to R^5 . The aralkyl part of the group may be any of the aralkyl groups defined and exemplified below in relation to substituents β . Specific examples of such groups include the benzylloxymethyl, α -naphthylmethoxymethyl, β -naphthylmethoxymethyl, phenethylloxymethyl, 2-benzylloxyethyl, 2- α -naphthylmethoxyethyl, 2- β -naphthylmethoxyethyl, 2-phenethylloxyethyl, 3-benzylloxypropyl, 3- α -naphthylmethoxypropyl, 3- β -naphthylmethoxypropyl, 3-phenethylloxypropyl, 4-benzylloxybutyl, 4- α -naphthylmethoxybutyl, 4- β -naphthylmethoxybutyl, 4-phenethylloxybutyl, 5-benzylloxypentyl, 5- α -naphthylmethoxypentyl, 5- β -naphthylmethoxypentyl, 5-phenethylloxypentyl, 6-benzylloxyhexyl, 6- α -naphthylmethoxyhexyl, 6- β -naphthylmethoxyhexyl and 6-phenethylloxyhexyl groups. The aryl parts of these groups may be substituted or unsubstituted, and, if substituted, the substituents are selected from substituents α , defined above.

Where R^A or R^B , substituent α or substituent γ represents an aliphatic carboxylic acyl group, this may be any of the aliphatic acyl groups, haloalkanoyl groups, alkoxyalkanoyl groups, alkenoyl groups, alkynoyl groups, alkoxy carbonyl groups, alkoxy carbonyl groups substituted with a halogen atom, and alkenyl carbonyl groups, defined and exemplified above in relation to R^5 , particularly the formyl, acetyl, propionyl, butyryl, isobutyryl, pentanoyl, pivaloyl, valeryl and iso-

valeryl groups, preferably the acetyl and propionyl groups.

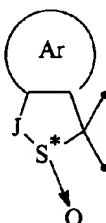
Where R^a or R^b , substituent α or substituent γ represents an alkanesulphonyl group, or a haloalkanesulphonyl group, this may be any of those groups defined and exemplified above in relation to R^5 or substituent β .

Where R^a or R^b represents a cycloalkyl group, this has from 3 to 8 ring carbon atoms, and examples include the cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl and cyclooctyl groups, of which the cyclopentyl and cyclohexyl groups are preferred.

Where R^a and R^b , together with the nitrogen atom to which they are attached, represent a nitrogen-containing heterocyclic group, this may have from 5 to 7 ring atoms, of which from 1 to 3 may be nitrogen and/or oxygen and/or sulphur hetero-atoms, at least one being nitrogen. The heterocyclic group is preferably a saturated (non-aromatic) group. Examples of such groups include the pyrrolidino, piperidino, piperazino, N-methylpiperazino, morpholino and thiomorpholino groups.

Where R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group having from 5 to 10 ring atoms, this group is unsubstituted or is substituted by at least one substituent selected from substituents β , defined above. The heterocyclic group has a single nitrogen and/or oxygen and/or sulphur hetero-atom. Alternatively, R^4 and R^5 together with the carbon atom to which they are attached may represent a cycloalkyl or heterocyclic group as defined above which is fused to a carbocyclic aryl group or to an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α , defined above. Examples of such groups include the aromatic and saturated heterocyclic groups exemplified above in relation to R^a and R^b , R^1 etc. and R^6 , respectively, and the cycloalkyl groups exemplified above in relation to R^a and R^b .

A particularly preferred group which may be represented by R^4 and R^5 , together with the carbon atom to which they are attached, is the group of formula:



in which Ar, J and $S^* \rightarrow O$ are as defined above.

Where substituent α or substituent γ represents a halogen atom, this may be a fluorine, chlorine, bromine or iodine atom, preferably a fluorine or chlorine atom.

Where substituent α represents a haloalkyl group, the alkyl part may be a straight or branched chain group having from 1 to 6, preferably from 1 to 3, carbon atoms. There is no restriction on the number of halogen atoms, except that imposed by the number of substitutable positions; however, in general, from 1 to 3 halogen atoms are preferred. Examples of such groups include the trifluoromethyl, trichloromethyl, difluoromethyl, dichloromethyl, dibromomethyl, fluoromethyl, chloromethyl, bromomethyl, iodomethyl, 2,2,2-trichloroethyl, 2,2,2-trifluoroethyl, 2-bromoethyl, 2-chloroethyl, 2-fluoroethyl, 2-iodoethyl, 2,2-dibromoethyl, 3-bromopropyl, 3-chloropropyl, 3-fluoropropyl, 3-iodopropyl, 4-bromobutyl, 4-chlorobutyl, 4-fluorobutyl, 4-iodobutyl, 5-bromopentyl, 5-chloropentyl, 5-fluoropentyl, 5-iodopentyl, 6-bromohexyl, 6-chlorohexyl, 6-fluorohexyl and 6-iodohexyl groups, of which we prefer the trifluoromethyl, 2-bromoethyl, 2-chloroethyl and 2-fluoroethyl groups.

Where substituent α or substituent γ represents an alkoxycarbonyl group having from 1 to 6 carbon atoms in the alkoxy part, this may be any of the groups defined and exemplified above in relation to R^5 .

Where substituent α or substituent γ represents an acylamino group, the acyl part of this may be any of the groups exemplified above for R^5 , etc. Specific preferred examples of such groups include aliphatic carboxylic acylamino groups, such as the formamido, acetamido, propionamido, butyramido, isobutyramido, pentanoylamino, pivaloylamino, valerylamino and isovalerylamino groups, preferably the acetamido and propionamido groups.

Where substituent β represents an alkanesulphonyl group having from 1 to 6 carbon atoms, this may be a straight or branched chain group having from 1 to 6, preferably from 1 to 4, carbon atoms, and examples include the methanesulphonyl, ethanesulphonyl, propanesulphonyl, isopropanesulphonyl, butanesulphonyl, isobutanesulphonyl, sec-butan sulphonyl, t-butan sulphonyl, pentanesulphonyl, isopentanesulphonyl, neopentanesulphonyl, 2-methylbutanesulphonyl, 1-ethylpropanesulphonyl, 4-methylpentanesulphonyl, 3-methylpentanesulphonyl, 2-methylpentanesulphonyl, 1-methylpentanesulphonyl, 3,3-dimethylbutanesulphonyl, 2,2-dimethylbutanesulphonyl, 1,1-

dimethylbutanesulphonyl, 1,2-dimethylbutanesulphonyl, 1,3-dimethylbutanesulphonyl, 2,3-dimethylbutanesulphonyl, 2-ethylbutanesulphonyl, hexanesulphonyl and isohexanesulphonyl groups. Of these, we prefer those alkanesulphonyl groups having from 1 to 4 carbon atoms, preferably the methanesulphonyl, ethanesulphonyl, propanesulphonyl, isopropanesulphonyl, butanesulphonyl and isobutanesulphonyl groups, and most preferably the methanesulphonyl group.

Where R^a or R^b or substituent β represents an aralkyl group in which an alkyl group having from 1 to 4 carbon atoms is substituted by from 1 to 3 carbocyclic aryl groups, this is as defined above, and examples include the benzyl, α -naphthylmethyl, β -naphthylmethyl, indenylmethyl, phenanthrenylmethyl, anthracenylmethyl, diphenylmethyl, triphenylmethyl, 1-phenethyl, 2-phenethyl, 1- α -naphthylethyl, 2- α -naphthylethyl, 1- β -naphthylethyl, 2- β -naphthylethyl, 1-phenylpropyl, 2-phenylpropyl, 3-phenylpropyl, 1- α -naphthylpropyl, 2- α -naphthylpropyl, 3- α -naphthylpropyl, 1- β -naphthylpropyl, 2- β -naphthylpropyl, 3- β -naphthylpropyl, 1-phenylbutyl, 2-phenylbutyl, 3-phenylbutyl, 4-phenylbutyl, 1- α -naphthylbutyl, 2- α -naphthylbutyl, 3- α -naphthylbutyl, 4- α -naphthylbutyl, 1- β -naphthylbutyl, 2- β -naphthylbutyl, 3- β -naphthylbutyl, 4- β -naphthylbutyl, 1-phenylpentyl, 2-phenylpentyl, 3-phenylpentyl, 4-phenylpentyl, 5-phenylpentyl, 1- α -naphthylpentyl, 2- α -naphthylpentyl, 3- α -naphthylpentyl, 4- α -naphthylpentyl, 5- α -naphthylpentyl, 1- β -naphthylpentyl, 2- β -naphthylpentyl, 3- β -naphthylpentyl, 4- β -naphthylpentyl, 5- β -naphthylpentyl, 1-phenylhexyl, 2-phenylhexyl, 3-phenylhexyl, 4-phenylhexyl, 5-phenylhexyl, 6-phenylhexyl, 1- α -naphthylhexyl, 2- α -naphthylhexyl, 3- α -naphthylhexyl, 4- α -naphthylhexyl, 5- α -naphthylhexyl, 6- α -naphthylhexyl, 1- β -naphthylhexyl, 2- β -naphthylhexyl, 3- β -naphthylhexyl, 4- β -naphthylhexyl, 5- β -naphthylhexyl and 6- β -naphthylhexyl groups, of which we prefer those aralkyl groups in which the aryl group moiety is benzene and the alkyl group has from 1 to 4 carbon atoms, more preferably the benzyl group or the phenethyl group.

Where substituent α represents an alkanesulphonylamino group, or a haloalkanesulphonylamino group, the alkanesulphonyl or haloalkanesulphonyl part of this may be any of those groups defined and exemplified above in relation to R^b or substituent β .

Where $R^{14'}$ represents an amino-protecting group, this may be any of the aliphatic acyl groups, the aromatic acyl groups and the alkoxy carbonyl groups defined and exemplified above in relation to R^5 etc., or the alkenyloxy carbonyl groups, the aralkyloxy carbonyl groups and the silyl groups as defined and exemplified below in relation to ester groups, preferably an alkoxy carbonyl group. Of these, we particularly prefer the t-butoxy carbonyl group.

Each compound of the present invention contains a basic group in its molecule and can thus form acid addition salts. Examples of such acid addition salts include: salts with mineral acids, especially hydrohalic acids (such as hydrofluoric acid, hydrobromic acid, hydroiodic acid or hydrochloric acid), nitric acid, perchloric acid, carbonic acid, sulphuric acid or phosphoric acid; salts with lower alkylsulphonic acids, such as methanesulphonic acid, trifluoromethanesulphonic acid or ethanesulphonic acid; salts with arylsulphonic acids, such as benzenesulphonic acid or p-toluenesulphonic acid; salts with organic carboxylic acids, such as acetic acid, fumaric acid, tartaric acid, oxalic acid, maleic acid, malic acid, succinic acid, benzoic acid, mandelic acid, ascorbic acid, lactic acid, gluconic acid or citric acid; and salts with amino acids, such as glycine, arginine, ornithine, lysine, glutamic acid or aspartic acid.

Since the compounds of formula (I) of the present invention can be converted into a quaternary amine by modifying the nitrogen atom of the piperidino or piperazino group in the molecule with a group R^7 , and thus salts of the compounds of formula (I) having a cation and an anion (which may be any atom or group which can form an anion, examples of which include halogen ions, such as the chlorine ion, and the iodine ion) these quaternary amines are also included in the present invention.

The compounds of formula (I) of the present invention can sometimes be converted into a hydrate by absorption of water or adhesion of absorbed water when they are allowed to stand in the atmosphere, and such hydrates are also included in the present invention.

The compounds of formula (I) of the present invention can form esters, which also form part of the present invention. Where the compound is intended for therapeutic use, the ester should be pharmaceutically acceptable, which, as is well known, means that it should not be more toxic (or unacceptably more toxic) than the parent compound, nor should it be less active (or unacceptably less active) than the parent compound. Such esters can be regarded as either "general" esters or "biologically cleavable" esters, either of which may act as protecting groups.

The "general" esters are esters which can be cleaved by a chemical process such as hydrogenolysis, hydrolysis, electrolysis, photolysis and the like. Examples of groups which can form esters with a hydroxy group include:

the above aliphatic acyl groups;

the above aromatic acyl groups;

tetrahydropyranyl or tetrahydrothiopyranyl groups, such as the tetrahydropyran-2-yl, 3-bromotetrahydropyran-2-yl, 4-methoxytetrahydropyran-4-yl, tetrahydropyran-2-yl and 4-methoxytetrahydrothiopyran-4-yl groups;

tetrahydrofuranyl or tetrahydrothiofuranyl groups, such as the tetrahydrofuran-2-yl and tetrahydrothiofuran-2-yl groups;

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carboxyloxyalkyl groups having from 1 to 6 carbon atoms in the alkyl part, such as the (alkoxycarbonyloxy)alkyl groups having from 1 to 6 carbon atoms in the alkyl and alkoxy parts and (cycloalkoxycarbonyloxy)alkyl groups having from 1 to 6 carbon atoms in the alkyl part and from 3 to 6 carbon atoms in the cycloalkoxy part (e.g. the methoxycarbonyloxymethyl, ethoxycarbonyloxymethyl, propoxycarbonyloxymethyl, isopropoxycarbonyloxymethyl, butoxycarbonyloxymethyl, isobutoxycarbonyloxymethyl, pentyloxycarbonyloxymethyl, hexyloxycarbonyloxymethyl, cyclohexyloxycarbonyloxymethyl, cyclohexyloxycarbonyloxy(cyclohexyl)methyl, 1-(methoxycarbonyloxy)ethyl, 1-(ethoxycarbonyloxy)ethyl, 1-(propoxycarbonyloxy)ethyl, 1-(isopropoxycarbonyloxy)ethyl, 1-(butoxycarbonyloxy)ethyl, 1-(isobutoxycarbonyloxy)ethyl).

loxy)ethyl, 1-(isobutoxycarbonyloxy)ethyl, 1-(t-butoxycarbonyloxy)ethyl, 1-(pentyloxycarbonyloxy)ethyl, 1-(hexyloxycarbonyloxy)ethyl, 1-(cyclopentyloxycarbonyloxy)ethyl, 1-(cyclopentylcarbonyloxy)propyl, 1-(cyclohexyloxycarbonyloxy)propyl, 1-(cyclopentyloxycarbonyloxy)butyl, 1-(cyclohexyloxycarbonyloxy)butyl, 1-(cyclohexyloxycarbonyloxy)ethyl, 1-(ethoxycarbonyloxy)propyl, 2-(methoxycarbonyloxy)ethyl, 2-(ethoxycarbonyloxy)ethyl, 2-(propoxycarbonyloxy)ethyl, 2-(isopropoxycarbonyloxy)ethyl, 2-(butoxycarbonyloxy)ethyl, 2-(isobutoxycarbonyloxy)ethyl, 2-(pentyloxycarbonyloxy)ethyl, 2-(hexyloxycarbonyloxy)ethyl, 1-(methoxycarbonyloxy)propyl, 1-(ethoxycarbonyloxy)propyl, 1-(propoxycarbonyloxy)propyl, 1-(isopropoxycarbonyloxy)propyl, 1-(butoxycarbonyloxy)propyl, 1-(isobutoxycarbonyloxy)propyl, 1-(pentyloxycarbonyloxy)propyl, 1-(hexyloxycarbonyloxy)propyl, 1-(methoxycarbonyloxy)butyl, 1-(ethoxycarbonyloxy)butyl, 1-(propoxycarbonyloxy)butyl, 1-(isopropoxycarbonyloxy)butyl, 1-(butoxycarbonyloxy)butyl, 1-(isobutoxycarbonyloxy)butyl, 1-(methoxycarbonyloxy)pentyl, 1-(ethoxycarbonyloxy)pentyl, 1-(methoxycarbonyloxy)hexyl and 1-(ethoxycarbonyloxy)hexyl groups);

oxodioxolenylmethyl groups (e.g. the (5-phenyl-2-oxo-1,3-dioxolen-4-yl)methyl, [5-(4-methylphenyl)-2-oxo-1,3-dioxolen-4-yl]methyl, [5-(4-methoxyphenyl)-2-oxo-1,3-dioxolen-4-yl]methyl, [5-(4-fluorophenyl)-2-oxo-1,3-dioxolen-4-yl]methyl, [5-(4-chlorophenyl)-2-oxo-1,3-dioxolen-4-yl]methyl, (2-oxo-1,3-dioxolen-4-yl)methyl, (5-methyl-2-oxo-1,3-dioxolen-4-yl)methyl, (5-ethyl-2-oxo-1,3-dioxolen-4-yl)methyl, (5-propyl-2-oxo-1,3-dioxolen-4-yl)methyl, (5-isopropyl-2-oxo-1,3-dioxolen-4-yl)methyl and (5-butyl-2-oxo-1,3-dioxolen-4-yl)methyl groups);

phthalidyl groups, such as the phthalidyl, dimethylphthalidyl and dimethoxyphthalidyl groups;

the above aliphatic acyl groups;

the above aromatic acyl groups;

half ester salt residues of succinic acid;

phosphate salt residues;

ester forming residues such as with amino acids;

1-(acyloxy)alkyloxycarbonyl groups, such as the pivaloyloxymethoxycarbonyl group.

Of these, we prefer the carbonyloxyalkyl groups.

The compounds of formula (I) of the present invention have an asymmetric carbon atom in the molecule, and stereoisomers whose asymmetric carbon atom has the R or S configurations are present. The stereoisomers whose asymmetric carbon atom has the R or S configurations and a mixture thereof having any proportion are also included in the present invention.

Preferred classes of compounds of the present invention are those compounds of formula (I) and salts and esters thereof in which E represents a methylene group and

(A1) R¹ and R² are the same or different and each represents a carbocyclic aryl group, an aromatic heterocyclic group or a carbocyclic aryl group substituted with from 1 to 3 groups selected from substituents α ;

(B1) R² represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 groups selected from substituents α ;

(C1) A represents a carbonyl group;

(D1) B is a single bond;

(E1) D is an oxygen atom;

(F1) G is an alkylene group having from 1 to 4 carbon atoms;

(G1) G is an alkylene group having 2 or 3 carbon atoms;

(H1) R³ represents an aromatic heterocyclic group or a carbocyclic aryl group substituted with from 1 to 3 groups selected from substituents α ;

(I1) L represents a group of formula $-C(R^4)(R^5)-$;

(J1) R^4 represents a carbocyclic aryl group or an aromatic heterocyclic group;

(K1) R^5 represents a group of formula $-CO-R^6$ (where R^6 represents an alkyl group having from 1 to 6 carbon atoms or a group of formula $-NR^aR^b$);

(L1) R^5 represents an amino group, an acylamino group or a hydroxy group;

(M1) R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group having from 5 to 10 ring atoms, said group being unsubstituted or being substituted by at least one substituent selected from substituents β , and said heterocyclic group having a single nitrogen and/or oxygen and/or sulphur hetero-atom, or R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group as defined above which is fused to a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α .

Further preferred classes of compounds of the present invention are those compounds of formula (I) and salts and esters thereof in which E represents a group of formula $-(CH_2)_n-$ in which n is an integer from 2 to 4, and

(A2) R^1 and R^2 are the same or different and each represents a carbocyclic aryl group, an aromatic heterocyclic group or a carbocyclic aryl group substituted with from 1 to 3 groups selected from substituents α ;

(B2) R^2 represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 groups selected from substituents α ;

(C2) A represents a carbonyl group;

(D2) B represents a single bond;

(E2) D represents an oxygen atom;

(F2) G represents an alkylene group having 1 to 4 carbon atoms;

(G2) G represents an alkylene group having 2 to 3 carbon atoms;

(H2) R^3 represents an aromatic heterocyclic group or a carbocyclic aryl group substituted with from 1 to 3 groups selected from substituents α ;

(I2) L represents a group of the general formula $-C(R^4)(R^5)-$;

(J2) R^4 represents a carbocyclic aryl group or an aromatic heterocyclic group;

(K2) R^5 represents a group of formula $-CO-R^6$ (in which R^6 represents an alkyl group having from 1 to 6 carbon atoms or a group of formula $-NR^aR^b$);

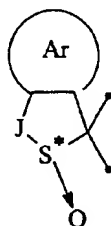
(L2) R^5 represents an amino group, an acylamino group or a hydroxy group;

(M2) n is 2 or 3;

(N2) n is 2;

(O2) R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group having from 5 to 10 ring atoms, said group being unsubstituted or being substituted by at least one substituent selected from substituents β , and said heterocyclic group having a single nitrogen and/or oxygen and/or sulphur hetero-atom, or R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group as defined above which is fused to a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α .

Still further preferred classes of compounds of the present invention are those compounds of formula (I) and salts and esters thereof in which R⁴ and R⁵ together with the carbon atom to which they are attached represent a group of formula:



and

(A3) R¹ represents a carbocyclic aryl group, an aromatic heterocyclic group, or a carbocyclic aryl group substituted with from 1 to 3 groups selected from substituents α ;

(B3) R¹ represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 groups selected from substituents α ¹;

substituents α ¹ are selected from alkyl groups having from 1 to 6 carbon atoms, haloalkyl groups having from 1 to 6 carbon atoms, and alkoxy groups having from 1 to 6 carbon atoms;

(C3) R² represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 groups selected from substituents α ;

(D3) R² represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 halogen atoms;

(E3) A represents a carbonyl group;

(F3) B represents a single bond;

(G3) D represents an oxygen atom;

(H3) E represents a C₁₋₄ alkylene group or a C₃₋₈ alkylene group which contains a C₃₋₆ cycloalkane-1,1-diyl group;

(I3) E represents a methylene, ethylene, dimethylmethylene, 1,1-dimethylethylene, 2,2-dimethylethylene, cyclopropane-1,1-diyl, cyclobutane-1,1-diyl, cyclopentane-1,1-diyl, cyclohexane-1,1-diyl, cyclopropane-1,1-diylmethyl, cyclobutane-1,1-diylmethyl, cyclopentane-1,1-diylmethyl or cyclohexane-1,1-diylmethyl group;

(J3) G represents a C₁₋₄ alkylene group;

(K3) G represents a C₂₋₃ alkylene group;

(L3) J represents a C₁₋₄ alkylene group;

(M3) J represents a methylene or ethylene group;

(N3) the ring Ar represents a carbocyclic aryl group, a carbocyclic aryl group substituted with from 1 to 3 groups selected from substituents α or an aromatic heterocyclic group;

(O3) the ring Ar represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 groups selected from substituents α .

Examples of certain of the compounds of the present invention, which can be prepared as described hereinafter in

the Examples, are shown in the following formulae (I-1), (I-2) and (I-3). The substituent groups are as defined in the corresponding one of Tables 1, 2 and 3, i.e. Table 1 relates to formula (I-1), etc.

Each of the compound numbers shown in these Tables covers 2 compounds, one in which G represents a dimethylene group (which may be referred to by the number assigned to it in the Table and the suffix "a") and one in which G represents a trimethylene group (which may be referred to by the number assigned to it in the Table and the suffix "b").

Moreover, each of Compounds No. 2-1537 to 2-3072 also covers compounds in which B can represent a single bond or a CH₂ group. These may be identified by a further suffix, α or β , respectively, so that, for example, Compound No. 2-1537 where G represents a dimethylene group and B represents a single bond may be known as Compound No. 2-1537a α , Compound No. 2-1537 where G represents a dimethylene group and B represents a CH₂ group may be known as Compound No. 2-1537a β , Compound No. 2-1537 where G represents a trimethylene group and B represents a single bond may be known as Compound No. 2-1537b α , and Compound No. 2-1537 where G represents a trimethylene group and B represents a CH₂ group may be known as Compound No. 2-1537b β .

Certain of the names of substituent groups are abbreviated in the Tables, as follows:

15	cBu	cyclobutane-1,1-diyl
	cHx	cyclohexane-1,1-diyl
	Me	methyl
	Ph	phenyl
	cPn	cyclopentane-1,1-diyl
20	cPr	cyclopropane-1,1-diyl

Also, the groups having the following formulae are referred to by the associated reference Sub-xx as shown below:

25

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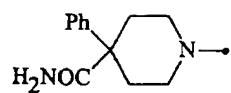
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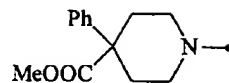
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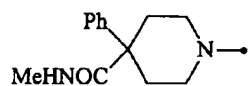
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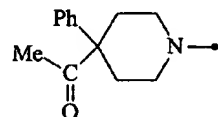
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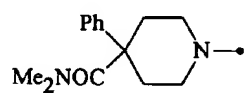
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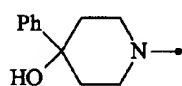
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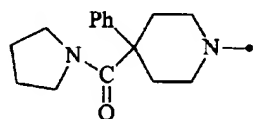
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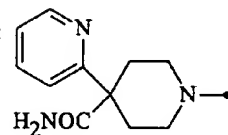
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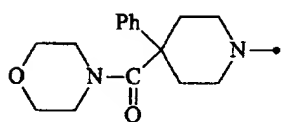
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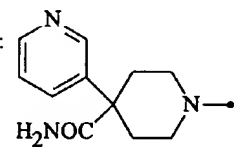
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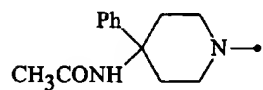
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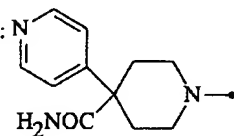
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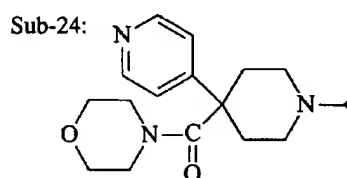
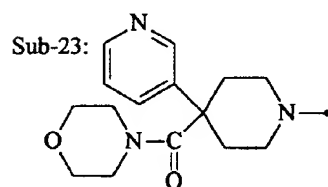
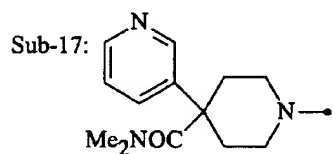
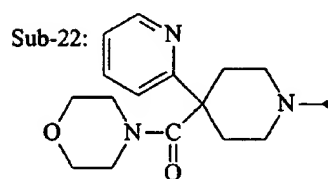
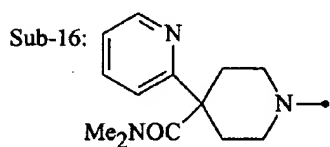
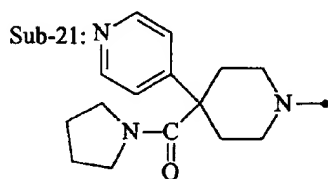
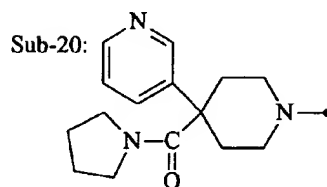
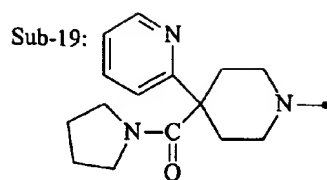


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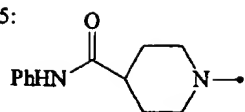


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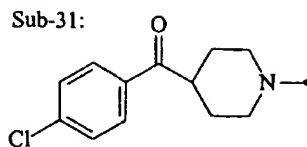




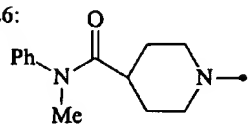
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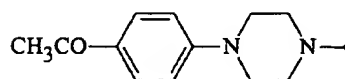
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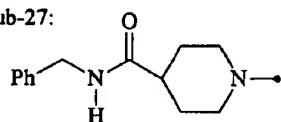
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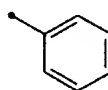
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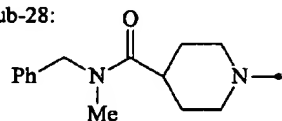
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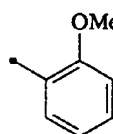
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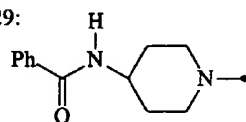
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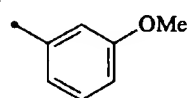
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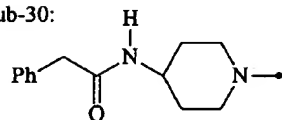
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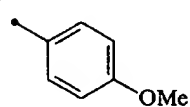
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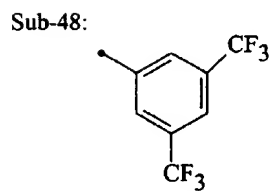
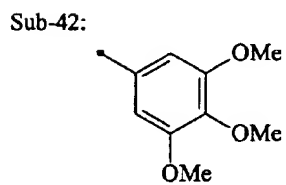
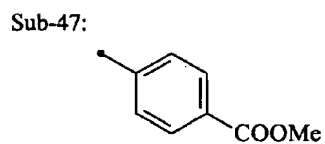
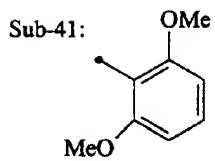
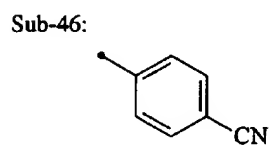
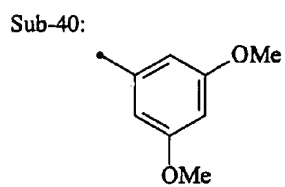
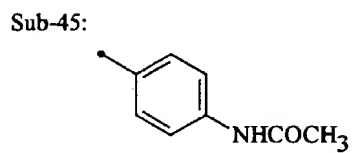
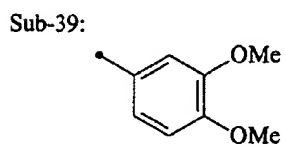
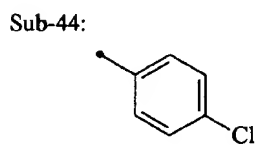
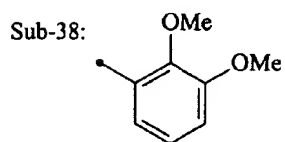
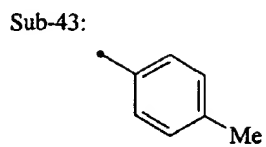
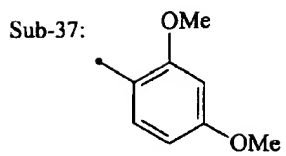


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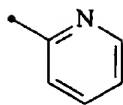


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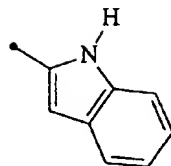




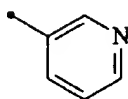
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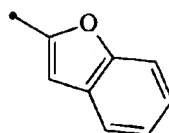
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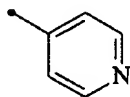
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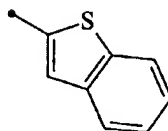
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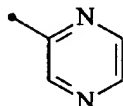
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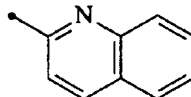
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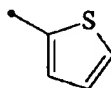
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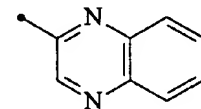
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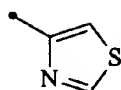
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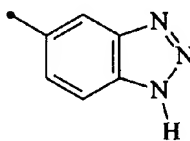
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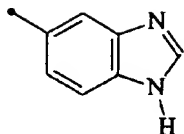
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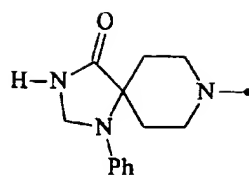
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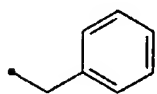
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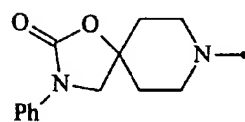
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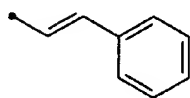
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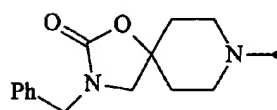
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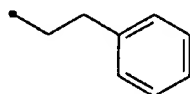
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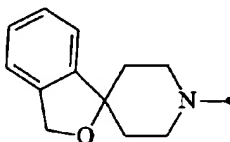
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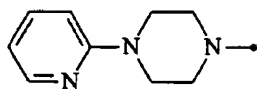
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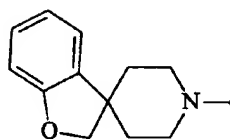
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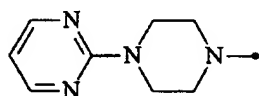
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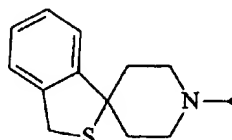
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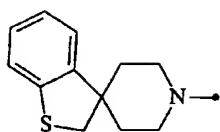
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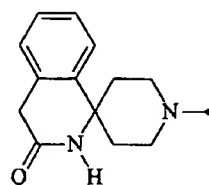
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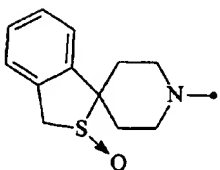
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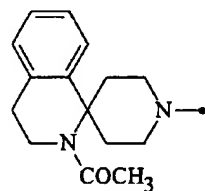
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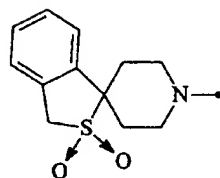
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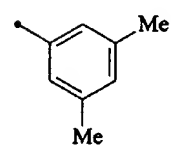
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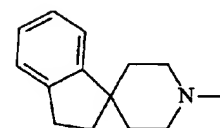
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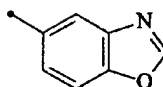
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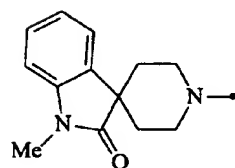
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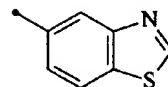
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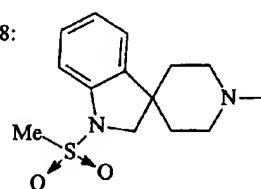
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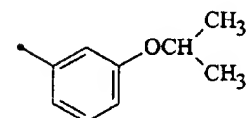
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Sub-78:



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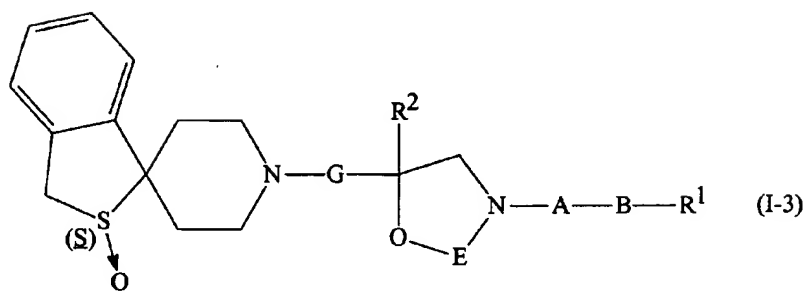
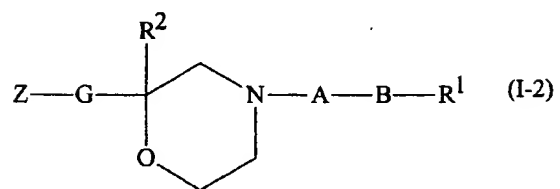
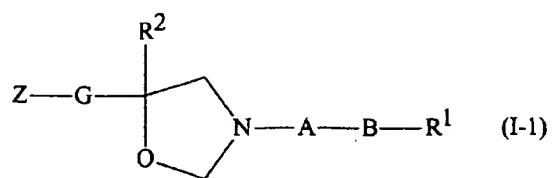


Table 1

Cpd. No.	R ¹	R ²	A	B	Z
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1-3	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-3
1-4	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-4
1-5	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-5
1-6	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-6
1-7	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-7
1-8	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-8
1-9	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-9
1-10	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-10
1-11	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-11
1-12	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-12
1-13	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-13
1-14	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-14
1-15	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-15
1-16	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-16
1-17	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-17
1-18	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-18
1-19	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-19
1-20	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-20
1-21	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-21
1-22	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-22
1-23	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-23
1-24	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-24
1-25	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-25
1-26	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-26

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-27	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-27
1-28	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-28
1-29	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-29
1-30	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-30
1-31	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-31
1-32	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-32
1-33	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-1
1-34	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-2
1-35	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-3
1-36	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-4
1-37	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-5
1-38	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-6
1-39	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-7
1-40	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-8
1-41	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-9
1-42	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-10
1-43	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-11
1-44	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-12
1-45	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-13
1-46	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-14
1-47	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-15
1-48	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-16
1-49	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-17
1-50	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-18
1-51	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-19
1-52	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-20

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-53	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-21
1-54	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-22
1-55	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-23
1-56	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-24
1-57	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-25
1-58	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-26
1-59	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-27
1-60	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-28
1-61	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-29
1-62	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-30
1-63	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-31
1-64	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-32
1-65	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-1
1-66	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-2
1-67	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-3
1-68	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-4
1-69	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-5
1-70	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-6
1-71	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-7
1-72	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-8
1-73	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-9
1-74	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-10
1-75	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-11
1-76	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-12
1-77	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-13
1-78	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-14

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-79	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-15
1-80	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-16
1-81	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-17
1-82	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-18
1-83	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-19
1-84	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-20
1-85	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-21
1-86	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-22
1-87	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-23
1-88	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-24
1-89	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-25
1-90	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-26
1-91	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-27
1-92	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-28
1-93	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-29
1-94	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-30
1-95	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-31
1-96	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-32
1-97	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-1
1-98	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-2
1-99	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-3
1-100	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-4
1-101	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-5
1-102	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-6
1-103	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-7
1-104	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-8

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-105	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-9
1-106	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-10
1-107	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-11
1-108	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-12
1-109	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-13
1-110	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-14
1-111	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-15
1-112	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-16
1-113	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-17
1-114	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-18
1-115	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-19
1-116	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-20
1-117	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-21
1-118	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-22
1-119	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-23
1-120	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-24
1-121	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-25
1-122	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-26
1-123	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-27
1-124	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-28
1-125	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-29
1-126	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-30
1-127	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-31
1-128	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-32
1-129	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-1
1-130	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-2

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-131	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-3
1-132	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-4
1-133	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-5
1-134	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-6
1-135	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-7
1-136	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-8
1-137	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-9
1-138	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-10
1-139	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-11
1-140	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-12
1-141	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-13
1-142	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-14
1-143	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-15
1-144	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-16
1-145	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-17
1-146	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-18
1-147	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-19
1-148	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-20
1-149	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-21
1-150	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-22
1-151	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-23
1-152	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-24
1-153	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-25
1-154	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-26
1-155	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-27
1-156	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-28

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-157	Sub-37	3,4-diCIPh	CH ₂	Single bond	Sub-29
1-158	Sub-37	3,4-diCIPh	CH ₂	Single bond	Sub-30
1-159	Sub-37	3,4-diCIPh	CH ₂	Single bond	Sub-31
1-160	Sub-37	3,4-diCIPh	CH ₂	Single bond	Sub-32
1-161	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-1
1-162	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-2
1-163	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-3
1-164	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-4
1-165	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-5
1-166	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-6
1-167	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-7
1-168	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-8
1-169	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-9
1-170	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-10
1-171	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-11
1-172	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-12
1-173	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-13
1-174	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-14
1-175	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-15
1-176	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-16
1-177	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-17
1-178	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-18
1-179	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-19
1-180	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-20
1-181	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-21
1-182	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-22

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-183	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-23
1-184	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-24
1-185	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-25
1-186	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-26
1-187	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-27
1-188	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-28
1-189	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-29
1-190	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-30
1-191	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-31
1-192	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-32
1-193	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-1
1-194	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-2
1-195	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-3
1-196	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-4
1-197	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-5
1-198	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-6
1-199	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-7
1-200	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-8
1-201	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-9
1-202	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-10
1-203	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-11
1-204	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-12
1-205	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-13
1-206	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-14
1-207	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-15
1-208	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-16

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-209	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-17
1-210	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-18
1-211	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-19
1-212	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-20
1-213	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-21
1-214	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-22
1-215	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-23
1-216	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-24
1-217	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-25
1-218	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-26
1-219	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-27
1-220	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-28
1-221	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-29
1-222	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-30
1-223	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-31
1-224	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-32
1-225	Sub-40	3,4-diCIPh	CH ₂	Single bond	Sub-1
1-226	Sub-40	3,4-diCIPh	CH ₂	Single bond	Sub-2
1-227	Sub-40	3,4-diCIPh	CH ₂	Single bond	Sub-3
1-228	Sub-40	3,4-diCIPh	CH ₂	Single bond	Sub-4
1-229	Sub-40	3,4-diCIPh	CH ₂	Single bond	Sub-5
1-230	Sub-40	3,4-diCIPh	CH ₂	Single bond	Sub-6
1-231	Sub-40	3,4-diCIPh	CH ₂	Single bond	Sub-7
1-232	Sub-40	3,4-diCIPh	CH ₂	Single bond	Sub-8
1-233	Sub-40	3,4-diCIPh	CH ₂	Single bond	Sub-9
1-234	Sub-40	3,4-diCIPh	CH ₂	Single bond	Sub-10

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-235	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-11
1-236	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-12
1-237	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-13
1-238	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-14
1-239	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-15
1-240	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-16
1-241	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-17
1-242	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-18
1-243	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-19
1-244	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-20
1-245	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-21
1-246	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-22
1-247	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-23
1-248	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-24
1-249	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-25
1-250	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-26
1-251	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-27
1-252	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-28
1-253	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-29
1-254	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-30
1-255	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-31
1-256	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-32
1-257	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-1
1-258	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-2
1-259	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-3
1-260	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-4

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-261	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-5
1-262	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-6
1-263	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-7
1-264	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-8
1-265	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-9
1-266	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-10
1-267	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-11
1-268	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-12
1-269	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-13
1-270	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-14
1-271	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-15
1-272	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-16
1-273	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-17
1-274	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-18
1-275	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-19
1-276	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-20
1-277	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-21
1-278	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-22
1-279	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-23
1-280	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-24
1-281	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-25
1-282	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-26
1-283	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-27
1-284	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-28
1-285	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-29
1-286	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-30

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-287	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-31
1-288	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-32
1-289	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-1
1-290	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-2
1-291	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-3
1-292	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-4
1-293	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-5
1-294	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-6
1-295	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-7
1-296	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-8
1-297	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-9
1-298	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-10
1-299	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-11
1-300	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-12
1-301	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-13
1-302	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-14
1-303	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-15
1-304	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-16
1-305	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-17
1-306	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-18
1-307	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-19
1-308	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-20
1-309	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-21
1-310	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-22
1-311	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-23
1-312	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-24

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-313	Sub-42	3,4-diCIPh	CH ₂	Single bond	Sub-25
1-314	Sub-42	3,4-diCIPh	CH ₂	Single bond	Sub-26
1-315	Sub-42	3,4-diCIPh	CH ₂	Single bond	Sub-27
1-316	Sub-42	3,4-diCIPh	CH ₂	Single bond	Sub-28
1-317	Sub-42	3,4-diCIPh	CH ₂	Single bond	Sub-29
1-318	Sub-42	3,4-diCIPh	CH ₂	Single bond	Sub-30
1-319	Sub-42	3,4-diCIPh	CH ₂	Single bond	Sub-31
1-320	Sub-42	3,4-diCIPh	CH ₂	Single bond	Sub-32
1-321	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-1
1-322	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-2
1-323	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-3
1-324	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-4
1-325	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-5
1-326	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-6
1-327	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-7
1-328	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-8
1-329	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-9
1-330	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-10
1-331	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-11
1-332	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-12
1-333	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-13
1-334	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-14
1-335	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-15
1-336	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-16
1-337	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-17
1-338	Sub-43	3,4-diCIPh	CH ₂	Single bond	Sub-18

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-339	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-19
1-340	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-20
1-341	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-21
1-342	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-22
1-343	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-23
1-344	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-24
1-345	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-25
1-346	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-26
1-347	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-27
1-348	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-28
1-349	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-29
1-350	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-30
1-351	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-31
1-352	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-32
1-353	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-1
1-354	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-2
1-355	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-3
1-356	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-4
1-357	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-5
1-358	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-6
1-359	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-7
1-360	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-8
1-361	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-9
1-362	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-10
1-363	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-11
1-364	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-12

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-365	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-13
1-366	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-14
1-367	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-15
1-368	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-16
1-369	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-17
1-370	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-18
1-371	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-19
1-372	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-20
1-373	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-21
1-374	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-22
1-375	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-23
1-376	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-24
1-377	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-25
1-378	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-26
1-379	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-27
1-380	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-28
1-381	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-29
1-382	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-30
1-383	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-31
1-384	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-32
1-385	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-1
1-386	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-2
1-387	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-3
1-388	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-4
1-389	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-5
1-390	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-6

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-391	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-7
1-392	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-8
1-393	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-9
1-394	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-10
1-395	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-11
1-396	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-12
1-397	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-13
1-398	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-14
1-399	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-15
1-400	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-16
1-401	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-17
1-402	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-18
1-403	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-19
1-404	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-20
1-405	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-21
1-406	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-22
1-407	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-23
1-408	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-24
1-409	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-25
1-410	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-26
1-411	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-27
1-412	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-28
1-413	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-29
1-414	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-30
1-415	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-31
1-416	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-32

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-417	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-1
1-418	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-2
1-419	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-3
1-420	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-4
1-421	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-5
1-422	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-6
1-423	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-7
1-424	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-8
1-425	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-9
1-426	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-10
1-427	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-11
1-428	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-12
1-429	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-13
1-430	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-14
1-431	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-15
1-432	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-16
1-433	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-17
1-434	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-18
1-435	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-19
1-436	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-20
1-437	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-21
1-438	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-22
1-439	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-23
1-440	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-24
1-441	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-25
1-442	Sub-46	3,4-diCIPh	CH ₂	Single bond	Sub-26

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-443	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-27
1-444	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-28
1-445	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-29
1-446	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-30
1-447	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-31
1-448	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-32
1-449	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-1
1-450	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-2
1-451	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-3
1-452	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-4
1-453	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-5
1-454	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-6
1-455	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-7
1-456	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-8
1-457	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-9
1-458	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-10
1-459	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-11
1-460	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-12
1-461	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-13
1-462	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-14
1-463	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-15
1-464	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-16
1-465	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-17
1-466	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-18
1-467	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-19
1-468	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-20

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-469	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-21
1-470	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-22
1-471	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-23
1-472	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-24
1-473	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-25
1-474	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-26
1-475	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-27
1-476	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-28
1-477	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-29
1-478	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-30
1-479	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-31
1-480	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-32
1-481	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-1
1-482	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-2
1-483	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-3
1-484	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-4
1-485	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-5
1-486	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-6
1-487	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-7
1-488	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-8
1-489	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-9
1-490	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-10
1-491	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-11
1-492	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-12
1-493	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-13
1-494	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-14

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-495	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-15
1-496	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-16
1-497	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-17
1-498	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-18
1-499	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-19
1-500	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-20
1-501	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-21
1-502	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-22
1-503	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-23
1-504	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-24
1-505	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-25
1-506	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-26
1-507	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-27
1-508	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-28
1-509	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-29
1-510	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-30
1-511	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-31
1-512	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-32
1-513	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-1
1-514	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-2
1-515	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-3
1-516	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-4
1-517	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-5
1-518	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-6
1-519	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-7
1-520	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-8

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-521	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-9
1-522	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-10
1-523	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-11
1-524	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-12
1-525	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-13
1-526	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-14
1-527	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-15
1-528	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-16
1-529	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-17
1-530	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-18
1-531	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-19
1-532	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-20
1-533	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-21
1-534	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-22
1-535	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-23
1-536	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-24
1-537	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-25
1-538	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-26
1-539	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-27
1-540	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-28
1-541	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-29
1-542	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-30
1-543	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-31
1-544	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-32
1-545	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-1
1-546	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-2

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-547	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-3
1-548	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-4
1-549	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-5
1-550	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-6
1-551	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-7
1-552	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-8
1-553	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-9
1-554	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-10
1-555	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-11
1-556	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-12
1-557	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-13
1-558	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-14
1-559	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-15
1-560	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-16
1-561	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-17
1-562	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-18
1-563	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-19
1-564	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-20
1-565	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-21
1-566	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-22
1-567	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-23
1-568	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-24
1-569	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-25
1-570	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-26
1-571	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-27
1-572	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-28

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-573	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-29
1-574	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-30
1-575	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-31
1-576	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-32
1-577	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-1
1-578	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-2
1-579	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-3
1-580	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-4
1-581	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-5
1-582	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-6
1-583	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-7
1-584	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-8
1-585	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-9
1-586	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-10
1-587	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-11
1-588	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-12
1-589	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-13
1-590	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-14
1-591	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-15
1-592	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-16
1-593	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-17
1-594	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-18
1-595	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-19
1-596	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-20
1-597	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-21
1-598	Sub-51	3,4-diCIPh	CH ₂	Single bond	Sub-22

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-599	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-23
1-600	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-24
1-601	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-25
1-602	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-26
1-603	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-27
1-604	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-28
1-605	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-29
1-606	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-30
1-607	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-31
1-608	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-32
1-609	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-1
1-610	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-2
1-611	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-3
1-612	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-4
1-613	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-5
1-614	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-6
1-615	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-7
1-616	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-8
1-617	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-9
1-618	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-10
1-619	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-11
1-620	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-12
1-621	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-13
1-622	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-14
1-623	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-15
1-624	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-16

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-625	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-17
1-626	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-18
1-627	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-19
1-628	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-20
1-629	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-21
1-630	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-22
1-631	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-23
1-632	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-24
1-633	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-25
1-634	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-26
1-635	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-27
1-636	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-28
1-637	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-29
1-638	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-30
1-639	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-31
1-640	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-32
1-641	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-1
1-642	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-2
1-643	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-3
1-644	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-4
1-645	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-5
1-646	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-6
1-647	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-7
1-648	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-8
1-649	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-9
1-650	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-10

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-651	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-11
1-652	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-12
1-653	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-13
1-654	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-14
1-655	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-15
1-656	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-16
1-657	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-17
1-658	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-18
1-659	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-19
1-660	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-20
1-661	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-21
1-662	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-22
1-663	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-23
1-664	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-24
1-665	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-25
1-666	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-26
1-667	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-27
1-668	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-28
1-669	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-29
1-670	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-30
1-671	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-31
1-672	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-32
1-673	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-1
1-674	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-2
1-675	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-3
1-676	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-4

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-677	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-5
1-678	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-6
1-679	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-7
1-680	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-8
1-681	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-9
1-682	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-10
1-683	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-11
1-684	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-12
1-685	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-13
1-686	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-14
1-687	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-15
1-688	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-16
1-689	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-17
1-690	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-18
1-691	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-19
1-692	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-20
1-693	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-21
1-694	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-22
1-695	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-23
1-696	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-24
1-697	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-25
1-698	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-26
1-699	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-27
1-700	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-28
1-701	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-29
1-702	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-30

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-703	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-31
1-704	Sub-54	3,4-diCIPh	CH ₂	Single bond	Sub-32
1-705	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-1
1-706	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-2
1-707	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-3
1-708	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-4
1-709	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-5
1-710	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-6
1-711	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-7
1-712	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-8
1-713	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-9
1-714	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-10
1-715	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-11
1-716	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-12
1-717	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-13
1-718	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-14
1-719	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-15
1-720	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-16
1-721	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-17
1-722	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-18
1-723	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-19
1-724	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-20
1-725	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-21
1-726	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-22
1-727	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-23
1-728	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-24

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-729	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-25
1-730	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-26
1-731	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-27
1-732	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-28
1-733	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-29
1-734	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-30
1-735	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-31
1-736	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-32
1-737	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-1
1-738	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-2
1-739	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-3
1-740	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-4
1-741	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-5
1-742	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-6
1-743	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-7
1-744	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-8
1-745	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-9
1-746	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-10
1-747	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-11
1-748	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-12
1-749	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-13
1-750	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-14
1-751	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-15
1-752	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-16
1-753	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-17
1-754	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-18

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-755	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-19
1-756	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-20
1-757	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-21
1-758	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-22
1-759	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-23
1-760	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-24
1-761	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-25
1-762	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-26
1-763	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-27
1-764	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-28
1-765	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-29
1-766	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-30
1-767	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-31
1-768	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-32
1-769	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-1
1-770	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-2
1-771	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-3
1-772	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-4
1-773	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-5
1-774	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-6
1-775	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-7
1-776	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-8
1-777	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-9
1-778	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-10
1-779	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-11
1-780	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-12

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-781	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-13
1-782	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-14
1-783	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-15
1-784	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-16
1-785	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-17
1-786	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-18
1-787	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-19
1-788	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-20
1-789	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-21
1-790	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-22
1-791	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-23
1-792	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-24
1-793	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-25
1-794	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-26
1-795	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-27
1-796	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-28
1-797	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-29
1-798	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-30
1-799	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-31
1-800	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-32
1-801	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-1
1-802	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-2
1-803	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-3
1-804	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-4
1-805	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-5
1-806	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-6

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-807	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-7
1-808	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-8
1-809	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-9
1-810	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-10
1-811	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-11
1-812	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-12
1-813	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-13
1-814	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-14
1-815	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-15
1-816	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-16
1-817	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-17
1-818	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-18
1-819	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-19
1-820	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-20
1-821	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-21
1-822	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-22
1-823	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-23
1-824	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-24
1-825	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-25
1-826	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-26
1-827	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-27
1-828	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-28
1-829	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-29
1-830	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-30
1-831	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-31
1-832	Sub-58	3,4-diCIPh	CH ₂	Single bond	Sub-32

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-833	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-1
1-834	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-2
1-835	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-3
1-836	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-4
1-837	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-5
1-838	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-6
1-839	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-7
1-840	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-8
1-841	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-9
1-842	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-10
1-843	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-11
1-844	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-12
1-845	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-13
1-846	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-14
1-847	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-15
1-848	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-16
1-849	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-17
1-850	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-18
1-851	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-19
1-852	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-20
1-853	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-21
1-854	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-22
1-855	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-23
1-856	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-24
1-857	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-25
1-858	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-26

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-859	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-27
1-860	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-28
1-861	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-29
1-862	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-30
1-863	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-31
1-864	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-32
1-865	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-1
1-866	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-2
1-867	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-3
1-868	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-4
1-869	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-5
1-870	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-6
1-871	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-7
1-872	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-8
1-873	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-9
1-874	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-10
1-875	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-11
1-876	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-12
1-877	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-13
1-878	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-14
1-879	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-15
1-880	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-16
1-881	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-17
1-882	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-18
1-883	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-19
1-884	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-20

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-885	Sub-60	3,4-diCIPh	CH ₂	Single bond	Sub-21
1-886	Sub-60	3,4-diCIPh	CH ₂	Single bond	Sub-22
1-887	Sub-60	3,4-diCIPh	CH ₂	Single bond	Sub-23
1-888	Sub-60	3,4-diCIPh	CH ₂	Single bond	Sub-24
1-889	Sub-60	3,4-diCIPh	CH ₂	Single bond	Sub-25
1-890	Sub-60	3,4-diCIPh	CH ₂	Single bond	Sub-26
1-891	Sub-60	3,4-diCIPh	CH ₂	Single bond	Sub-27
1-892	Sub-60	3,4-diCIPh	CH ₂	Single bond	Sub-28
1-893	Sub-60	3,4-diCIPh	CH ₂	Single bond	Sub-29
1-894	Sub-60	3,4-diCIPh	CH ₂	Single bond	Sub-30
1-895	Sub-60	3,4-diCIPh	CH ₂	Single bond	Sub-31
1-896	Sub-60	3,4-diCIPh	CH ₂	Single bond	Sub-32
1-897	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-1
1-898	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-2
1-899	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-3
1-900	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-4
1-901	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-5
1-902	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-6
1-903	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-7
1-904	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-8
1-905	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-9
1-906	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-10
1-907	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-11
1-908	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-12
1-909	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-13
1-910	Sub-61	3,4-diCIPh	CH ₂	Single bond	Sub-14

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-911	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-15
1-912	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-16
1-913	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-17
1-914	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-18
1-915	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-19
1-916	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-20
1-917	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-21
1-918	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-22
1-919	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-23
1-920	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-24
1-921	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-25
1-922	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-26
1-923	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-27
1-924	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-28
1-925	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-29
1-926	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-30
1-927	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-31
1-928	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-32
1-929	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-1
1-930	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-2
1-931	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-3
1-932	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-4
1-933	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-5
1-934	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-6
1-935	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-7
1-936	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-8

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-937	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-9
1-938	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-10
1-939	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-11
1-940	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-12
1-941	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-13
1-942	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-14
1-943	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-15
1-944	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-16
1-945	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-17
1-946	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-18
1-947	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-19
1-948	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-20
1-949	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-21
1-950	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-22
1-951	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-23
1-952	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-24
1-953	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-25
1-954	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-26
1-955	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-27
1-956	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-28
1-957	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-29
1-958	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-30
1-959	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-31
1-960	Sub-62	3,4-diClPh	CH ₂	Single bond	Sub-32
1-961	Sub-63	3,4-diClPh	CH ₂	Single bond	Sub-1
1-962	Sub-63	3,4-diClPh	CH ₂	Single bond	Sub-2

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-963	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-3
1-964	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-4
1-965	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-5
1-966	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-6
1-967	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-7
1-968	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-8
1-969	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-9
1-970	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-10
1-971	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-11
1-972	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-12
1-973	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-13
1-974	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-14
1-975	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-15
1-976	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-16
1-977	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-17
1-978	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-18
1-979	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-19
1-980	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-20
1-981	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-21
1-982	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-22
1-983	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-23
1-984	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-24
1-985	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-25
1-986	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-26
1-987	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-27
1-988	Sub-63	3,4-diCIPh	CH ₂	Single bond	Sub-28

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-989	Sub-63	3,4-diClPh	CH ₂	Single bond	Sub-29
1-990	Sub-63	3,4-diClPh	CH ₂	Single bond	Sub-30
1-991	Sub-63	3,4-diClPh	CH ₂	Single bond	Sub-31
1-992	Sub-63	3,4-diClPh	CH ₂	Single bond	Sub-32
1-993	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-1
1-994	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-2
1-995	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-3
1-996	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-4
1-997	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-5
1-998	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-6
1-999	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-7
1-1000	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-8
1-1001	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-9
1-1002	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-10
1-1003	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-11
1-1004	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-12
1-1005	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-13
1-1006	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-14
1-1007	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-15
1-1008	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-16
1-1009	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-17
1-1010	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-18
1-1011	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-19
1-1012	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-20
1-1013	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-21
1-1014	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-22

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1015	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-23
1-1016	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-24
1-1017	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-25
1-1018	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-26
1-1019	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-27
1-1020	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-28
1-1021	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-29
1-1022	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-30
1-1023	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-31
1-1024	Sub-64	3,4-diClPh	CH ₂	Single bond	Sub-32
1-1025	Sub-33	3,4-diClPh	CO	Single bond	Sub-1
1-1026	Sub-33	3,4-diClPh	CO	Single bond	Sub-2
1-1027	Sub-33	3,4-diClPh	CO	Single bond	Sub-3
1-1028	Sub-33	3,4-diClPh	CO	Single bond	Sub-4
1-1029	Sub-33	3,4-diClPh	CO	Single bond	Sub-5
1-1030	Sub-33	3,4-diClPh	CO	Single bond	Sub-6
1-1031	Sub-33	3,4-diClPh	CO	Single bond	Sub-7
1-1032	Sub-33	3,4-diClPh	CO	Single bond	Sub-8
1-1033	Sub-33	3,4-diClPh	CO	Single bond	Sub-9
1-1034	Sub-33	3,4-diClPh	CO	Single bond	Sub-10
1-1035	Sub-33	3,4-diClPh	CO	Single bond	Sub-11
1-1036	Sub-33	3,4-diClPh	CO	Single bond	Sub-12
1-1037	Sub-33	3,4-diClPh	CO	Single bond	Sub-13
1-1038	Sub-33	3,4-diClPh	CO	Single bond	Sub-14
1-1039	Sub-33	3,4-diClPh	CO	Single bond	Sub-15
1-1040	Sub-33	3,4-diClPh	CO	Single bond	Sub-16

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1041	Sub-33	3,4-diClPh	CO	Single bond	Sub-17
1-1042	Sub-33	3,4-diClPh	CO	Single bond	Sub-18
1-1043	Sub-33	3,4-diClPh	CO	Single bond	Sub-19
1-1044	Sub-33	3,4-diClPh	CO	Single bond	Sub-20
1-1045	Sub-33	3,4-diClPh	CO	Single bond	Sub-21
1-1046	Sub-33	3,4-diClPh	CO	Single bond	Sub-22
1-1047	Sub-33	3,4-diClPh	CO	Single bond	Sub-23
1-1048	Sub-33	3,4-diClPh	CO	Single bond	Sub-24
1-1049	Sub-33	3,4-diClPh	CO	Single bond	Sub-25
1-1050	Sub-33	3,4-diClPh	CO	Single bond	Sub-26
1-1051	Sub-33	3,4-diClPh	CO	Single bond	Sub-27
1-1052	Sub-33	3,4-diClPh	CO	Single bond	Sub-28
1-1053	Sub-33	3,4-diClPh	CO	Single bond	Sub-29
1-1054	Sub-33	3,4-diClPh	CO	Single bond	Sub-30
1-1055	Sub-33	3,4-diClPh	CO	Single bond	Sub-31
1-1056	Sub-33	3,4-diClPh	CO	Single bond	Sub-32
1-1057	Sub-34	3,4-diClPh	CO	Single bond	Sub-1
1-1058	Sub-34	3,4-diClPh	CO	Single bond	Sub-2
1-1059	Sub-34	3,4-diClPh	CO	Single bond	Sub-3
1-1060	Sub-34	3,4-diClPh	CO	Single bond	Sub-4
1-1061	Sub-34	3,4-diClPh	CO	Single bond	Sub-5
1-1062	Sub-34	3,4-diClPh	CO	Single bond	Sub-6
1-1063	Sub-34	3,4-diClPh	CO	Single bond	Sub-7
1-1064	Sub-34	3,4-diClPh	CO	Single bond	Sub-8
1-1065	Sub-34	3,4-diClPh	CO	Single bond	Sub-9
1-1066	Sub-34	3,4-diClPh	CO	Single bond	Sub-10

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1067	Sub-34	3,4-diClPh	CO	Single bond	Sub-11
1-1068	Sub-34	3,4-diClPh	CO	Single bond	Sub-12
1-1069	Sub-34	3,4-diClPh	CO	Single bond	Sub-13
1-1070	Sub-34	3,4-diClPh	CO	Single bond	Sub-14
1-1071	Sub-34	3,4-diClPh	CO	Single bond	Sub-15
1-1072	Sub-34	3,4-diClPh	CO	Single bond	Sub-16
1-1073	Sub-34	3,4-diClPh	CO	Single bond	Sub-17
1-1074	Sub-34	3,4-diClPh	CO	Single bond	Sub-18
1-1075	Sub-34	3,4-diClPh	CO	Single bond	Sub-19
1-1076	Sub-34	3,4-diClPh	CO	Single bond	Sub-20
1-1077	Sub-34	3,4-diClPh	CO	Single bond	Sub-21
1-1078	Sub-34	3,4-diClPh	CO	Single bond	Sub-22
1-1079	Sub-34	3,4-diClPh	CO	Single bond	Sub-23
1-1080	Sub-34	3,4-diClPh	CO	Single bond	Sub-24
1-1081	Sub-34	3,4-diClPh	CO	Single bond	Sub-25
1-1082	Sub-34	3,4-diClPh	CO	Single bond	Sub-26
1-1083	Sub-34	3,4-diClPh	CO	Single bond	Sub-27
1-1084	Sub-34	3,4-diClPh	CO	Single bond	Sub-28
1-1085	Sub-34	3,4-diClPh	CO	Single bond	Sub-29
1-1086	Sub-34	3,4-diClPh	CO	Single bond	Sub-30
1-1087	Sub-34	3,4-diClPh	CO	Single bond	Sub-31
1-1088	Sub-34	3,4-diClPh	CO	Single bond	Sub-32
1-1089	Sub-35	3,4-diClPh	CO	Single bond	Sub-1
1-1090	Sub-35	3,4-diClPh	CO	Single bond	Sub-2
1-1091	Sub-35	3,4-diClPh	CO	Single bond	Sub-3
1-1092	Sub-35	3,4-diClPh	CO	Single bond	Sub-4

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1093	Sub-35	3,4-diClPh	CO	Single bond	Sub-5
1-1094	Sub-35	3,4-diClPh	CO	Single bond	Sub-6
1-1095	Sub-35	3,4-diClPh	CO	Single bond	Sub-7
1-1096	Sub-35	3,4-diClPh	CO	Single bond	Sub-8
1-1097	Sub-35	3,4-diClPh	CO	Single bond	Sub-9
1-1098	Sub-35	3,4-diClPh	CO	Single bond	Sub-10
1-1099	Sub-35	3,4-diClPh	CO	Single bond	Sub-11
1-1100	Sub-35	3,4-diClPh	CO	Single bond	Sub-12
1-1101	Sub-35	3,4-diClPh	CO	Single bond	Sub-13
1-1102	Sub-35	3,4-diClPh	CO	Single bond	Sub-14
1-1103	Sub-35	3,4-diClPh	CO	Single bond	Sub-15
1-1104	Sub-35	3,4-diClPh	CO	Single bond	Sub-16
1-1105	Sub-35	3,4-diClPh	CO	Single bond	Sub-17
1-1106	Sub-35	3,4-diClPh	CO	Single bond	Sub-18
1-1107	Sub-35	3,4-diClPh	CO	Single bond	Sub-19
1-1108	Sub-35	3,4-diClPh	CO	Single bond	Sub-20
1-1109	Sub-35	3,4-diClPh	CO	Single bond	Sub-21
1-1110	Sub-35	3,4-diClPh	CO	Single bond	Sub-22
1-1111	Sub-35	3,4-diClPh	CO	Single bond	Sub-23
1-1112	Sub-35	3,4-diClPh	CO	Single bond	Sub-24
1-1113	Sub-35	3,4-diClPh	CO	Single bond	Sub-25
1-1114	Sub-35	3,4-diClPh	CO	Single bond	Sub-26
1-1115	Sub-35	3,4-diClPh	CO	Single bond	Sub-27
1-1116	Sub-35	3,4-diClPh	CO	Single bond	Sub-28
1-1117	Sub-35	3,4-diClPh	CO	Single bond	Sub-29
1-1118	Sub-35	3,4-diClPh	CO	Single bond	Sub-30

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1119	Sub-35	3,4-diClPh	CO	Single bond	Sub-31
1-1120	Sub-35	3,4-diClPh	CO	Single bond	Sub-32
1-1121	Sub-36	3,4-diClPh	CO	Single bond	Sub-1
1-1122	Sub-36	3,4-diClPh	CO	Single bond	Sub-2
1-1123	Sub-36	3,4-diClPh	CO	Single bond	Sub-3
1-1124	Sub-36	3,4-diClPh	CO	Single bond	Sub-4
1-1125	Sub-36	3,4-diClPh	CO	Single bond	Sub-5
1-1126	Sub-36	3,4-diClPh	CO	Single bond	Sub-6
1-1127	Sub-36	3,4-diClPh	CO	Single bond	Sub-7
1-1128	Sub-36	3,4-diClPh	CO	Single bond	Sub-8
1-1129	Sub-36	3,4-diClPh	CO	Single bond	Sub-9
1-1130	Sub-36	3,4-diClPh	CO	Single bond	Sub-10
1-1131	Sub-36	3,4-diClPh	CO	Single bond	Sub-11
1-1132	Sub-36	3,4-diClPh	CO	Single bond	Sub-12
1-1133	Sub-36	3,4-diClPh	CO	Single bond	Sub-13
1-1134	Sub-36	3,4-diClPh	CO	Single bond	Sub-14
1-1135	Sub-36	3,4-diClPh	CO	Single bond	Sub-15
1-1136	Sub-36	3,4-diClPh	CO	Single bond	Sub-16
1-1137	Sub-36	3,4-diClPh	CO	Single bond	Sub-17
1-1138	Sub-36	3,4-diClPh	CO	Single bond	Sub-18
1-1139	Sub-36	3,4-diClPh	CO	Single bond	Sub-19
1-1140	Sub-36	3,4-diClPh	CO	Single bond	Sub-20
1-1141	Sub-36	3,4-diClPh	CO	Single bond	Sub-21
1-1142	Sub-36	3,4-diClPh	CO	Single bond	Sub-22
1-1143	Sub-36	3,4-diClPh	CO	Single bond	Sub-23
1-1144	Sub-36	3,4-diClPh	CO	Single bond	Sub-24

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1145	Sub-36	3,4-diClPh	CO	Single bond	Sub-25
1-1146	Sub-36	3,4-diClPh	CO	Single bond	Sub-26
1-1147	Sub-36	3,4-diClPh	CO	Single bond	Sub-27
1-1148	Sub-36	3,4-diClPh	CO	Single bond	Sub-28
1-1149	Sub-36	3,4-diClPh	CO	Single bond	Sub-29
1-1150	Sub-36	3,4-diClPh	CO	Single bond	Sub-30
1-1151	Sub-36	3,4-diClPh	CO	Single bond	Sub-31
1-1152	Sub-36	3,4-diClPh	CO	Single bond	Sub-32
1-1153	Sub-37	3,4-diClPh	CO	Single bond	Sub-1
1-1154	Sub-37	3,4-diClPh	CO	Single bond	Sub-2
1-1155	Sub-37	3,4-diClPh	CO	Single bond	Sub-3
1-1156	Sub-37	3,4-diClPh	CO	Single bond	Sub-4
1-1157	Sub-37	3,4-diClPh	CO	Single bond	Sub-5
1-1158	Sub-37	3,4-diClPh	CO	Single bond	Sub-6
1-1159	Sub-37	3,4-diClPh	CO	Single bond	Sub-7
1-1160	Sub-37	3,4-diClPh	CO	Single bond	Sub-8
1-1161	Sub-37	3,4-diClPh	CO	Single bond	Sub-9
1-1162	Sub-37	3,4-diClPh	CO	Single bond	Sub-10
1-1163	Sub-37	3,4-diClPh	CO	Single bond	Sub-11
1-1164	Sub-37	3,4-diClPh	CO	Single bond	Sub-12
1-1165	Sub-37	3,4-diClPh	CO	Single bond	Sub-13
1-1166	Sub-37	3,4-diClPh	CO	Single bond	Sub-14
1-1167	Sub-37	3,4-diClPh	CO	Single bond	Sub-15
1-1168	Sub-37	3,4-diClPh	CO	Single bond	Sub-16
1-1169	Sub-37	3,4-diClPh	CO	Single bond	Sub-17
1-1170	Sub-37	3,4-diClPh	CO	Single bond	Sub-18

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1171	Sub-37	3,4-diClPh	CO	Single bond	Sub-19
1-1172	Sub-37	3,4-diClPh	CO	Single bond	Sub-20
1-1173	Sub-37	3,4-diClPh	CO	Single bond	Sub-21
1-1174	Sub-37	3,4-diClPh	CO	Single bond	Sub-22
1-1175	Sub-37	3,4-diClPh	CO	Single bond	Sub-23
1-1176	Sub-37	3,4-diClPh	CO	Single bond	Sub-24
1-1177	Sub-37	3,4-diClPh	CO	Single bond	Sub-25
1-1178	Sub-37	3,4-diClPh	CO	Single bond	Sub-26
1-1179	Sub-37	3,4-diClPh	CO	Single bond	Sub-27
1-1180	Sub-37	3,4-diClPh	CO	Single bond	Sub-28
1-1181	Sub-37	3,4-diClPh	CO	Single bond	Sub-29
1-1182	Sub-37	3,4-diClPh	CO	Single bond	Sub-30
1-1183	Sub-37	3,4-diClPh	CO	Single bond	Sub-31
1-1184	Sub-37	3,4-diClPh	CO	Single bond	Sub-32
1-1185	Sub-38	3,4-diClPh	CO	Single bond	Sub-1
1-1186	Sub-38	3,4-diClPh	CO	Single bond	Sub-2
1-1187	Sub-38	3,4-diClPh	CO	Single bond	Sub-3
1-1188	Sub-38	3,4-diClPh	CO	Single bond	Sub-4
1-1189	Sub-38	3,4-diClPh	CO	Single bond	Sub-5
1-1190	Sub-38	3,4-diClPh	CO	Single bond	Sub-6
1-1191	Sub-38	3,4-diClPh	CO	Single bond	Sub-7
1-1192	Sub-38	3,4-diClPh	CO	Single bond	Sub-8
1-1193	Sub-38	3,4-diClPh	CO	Single bond	Sub-9
1-1194	Sub-38	3,4-diClPh	CO	Single bond	Sub-10
1-1195	Sub-38	3,4-diClPh	CO	Single bond	Sub-11
1-1196	Sub-38	3,4-diClPh	CO	Single bond	Sub-12

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1197	Sub-38	3,4-diCIPh	CO	Single bond	Sub-13
1-1198	Sub-38	3,4-diCIPh	CO	Single bond	Sub-14
1-1199	Sub-38	3,4-diCIPh	CO	Single bond	Sub-15
1-1200	Sub-38	3,4-diCIPh	CO	Single bond	Sub-16
1-1201	Sub-38	3,4-diCIPh	CO	Single bond	Sub-17
1-1202	Sub-38	3,4-diCIPh	CO	Single bond	Sub-18
1-1203	Sub-38	3,4-diCIPh	CO	Single bond	Sub-19
1-1204	Sub-38	3,4-diCIPh	CO	Single bond	Sub-20
1-1205	Sub-38	3,4-diCIPh	CO	Single bond	Sub-21
1-1206	Sub-38	3,4-diCIPh	CO	Single bond	Sub-22
1-1207	Sub-38	3,4-diCIPh	CO	Single bond	Sub-23
1-1208	Sub-38	3,4-diCIPh	CO	Single bond	Sub-24
1-1209	Sub-38	3,4-diCIPh	CO	Single bond	Sub-25
1-1210	Sub-38	3,4-diCIPh	CO	Single bond	Sub-26
1-1211	Sub-38	3,4-diCIPh	CO	Single bond	Sub-27
1-1212	Sub-38	3,4-diCIPh	CO	Single bond	Sub-28
1-1213	Sub-38	3,4-diCIPh	CO	Single bond	Sub-29
1-1214	Sub-38	3,4-diCIPh	CO	Single bond	Sub-30
1-1215	Sub-38	3,4-diCIPh	CO	Single bond	Sub-31
1-1216	Sub-38	3,4-diCIPh	CO	Single bond	Sub-32
1-1217	Sub-39	3,4-diCIPh	CO	Single bond	Sub-1
1-1218	Sub-39	3,4-diCIPh	CO	Single bond	Sub-2
1-1219	Sub-39	3,4-diCIPh	CO	Single bond	Sub-3
1-1220	Sub-39	3,4-diCIPh	CO	Single bond	Sub-4
1-1221	Sub-39	3,4-diCIPh	CO	Single bond	Sub-5
1-1222	Sub-39	3,4-diCIPh	CO	Single bond	Sub-6

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1223	Sub-39	3,4-diClPh	CO	Single bond	Sub-7
1-1224	Sub-39	3,4-diClPh	CO	Single bond	Sub-8
1-1225	Sub-39	3,4-diClPh	CO	Single bond	Sub-9
1-1226	Sub-39	3,4-diClPh	CO	Single bond	Sub-10
1-1227	Sub-39	3,4-diClPh	CO	Single bond	Sub-11
1-1228	Sub-39	3,4-diClPh	CO	Single bond	Sub-12
1-1229	Sub-39	3,4-diClPh	CO	Single bond	Sub-13
1-1230	Sub-39	3,4-diClPh	CO	Single bond	Sub-14
1-1231	Sub-39	3,4-diClPh	CO	Single bond	Sub-15
1-1232	Sub-39	3,4-diClPh	CO	Single bond	Sub-16
1-1233	Sub-39	3,4-diClPh	CO	Single bond	Sub-17
1-1234	Sub-39	3,4-diClPh	CO	Single bond	Sub-18
1-1235	Sub-39	3,4-diClPh	CO	Single bond	Sub-19
1-1236	Sub-39	3,4-diClPh	CO	Single bond	Sub-20
1-1237	Sub-39	3,4-diClPh	CO	Single bond	Sub-21
1-1238	Sub-39	3,4-diClPh	CO	Single bond	Sub-22
1-1239	Sub-39	3,4-diClPh	CO	Single bond	Sub-23
1-1240	Sub-39	3,4-diClPh	CO	Single bond	Sub-24
1-1241	Sub-39	3,4-diClPh	CO	Single bond	Sub-25
1-1242	Sub-39	3,4-diClPh	CO	Single bond	Sub-26
1-1243	Sub-39	3,4-diClPh	CO	Single bond	Sub-27
1-1244	Sub-39	3,4-diClPh	CO	Single bond	Sub-28
1-1245	Sub-39	3,4-diClPh	CO	Single bond	Sub-29
1-1246	Sub-39	3,4-diClPh	CO	Single bond	Sub-30
1-1247	Sub-39	3,4-diClPh	CO	Single bond	Sub-31
1-1248	Sub-39	3,4-diClPh	CO	Single bond	Sub-32

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1249	Sub-40	3,4-diClPh	CO	Single bond	Sub-1
1-1250	Sub-40	3,4-diClPh	CO	Single bond	Sub-2
1-1251	Sub-40	3,4-diClPh	CO	Single bond	Sub-3
1-1252	Sub-40	3,4-diClPh	CO	Single bond	Sub-4
1-1253	Sub-40	3,4-diClPh	CO	Single bond	Sub-5
1-1254	Sub-40	3,4-diClPh	CO	Single bond	Sub-6
1-1255	Sub-40	3,4-diClPh	CO	Single bond	Sub-7
1-1256	Sub-40	3,4-diClPh	CO	Single bond	Sub-8
1-1257	Sub-40	3,4-diClPh	CO	Single bond	Sub-9
1-1258	Sub-40	3,4-diClPh	CO	Single bond	Sub-10
1-1259	Sub-40	3,4-diClPh	CO	Single bond	Sub-11
1-1260	Sub-40	3,4-diClPh	CO	Single bond	Sub-12
1-1261	Sub-40	3,4-diClPh	CO	Single bond	Sub-13
1-1262	Sub-40	3,4-diClPh	CO	Single bond	Sub-14
1-1263	Sub-40	3,4-diClPh	CO	Single bond	Sub-15
1-1264	Sub-40	3,4-diClPh	CO	Single bond	Sub-16
1-1265	Sub-40	3,4-diClPh	CO	Single bond	Sub-17
1-1266	Sub-40	3,4-diClPh	CO	Single bond	Sub-18
1-1267	Sub-40	3,4-diClPh	CO	Single bond	Sub-19
1-1268	Sub-40	3,4-diClPh	CO	Single bond	Sub-20
1-1269	Sub-40	3,4-diClPh	CO	Single bond	Sub-21
1-1270	Sub-40	3,4-diClPh	CO	Single bond	Sub-22
1-1271	Sub-40	3,4-diClPh	CO	Single bond	Sub-23
1-1272	Sub-40	3,4-diClPh	CO	Single bond	Sub-24
1-1273	Sub-40	3,4-diClPh	CO	Single bond	Sub-25
1-1274	Sub-40	3,4-diClPh	CO	Single bond	Sub-26

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1275	Sub-40	3,4-diClPh	CO	Single bond	Sub-27
1-1276	Sub-40	3,4-diClPh	CO	Single bond	Sub-28
1-1277	Sub-40	3,4-diClPh	CO	Single bond	Sub-29
1-1278	Sub-40	3,4-diClPh	CO	Single bond	Sub-30
1-1279	Sub-40	3,4-diClPh	CO	Single bond	Sub-31
1-1280	Sub-40	3,4-diClPh	CO	Single bond	Sub-32
1-1281	Sub-41	3,4-diClPh	CO	Single bond	Sub-1
1-1282	Sub-41	3,4-diClPh	CO	Single bond	Sub-2
1-1283	Sub-41	3,4-diClPh	CO	Single bond	Sub-3
1-1284	Sub-41	3,4-diClPh	CO	Single bond	Sub-4
1-1285	Sub-41	3,4-diClPh	CO	Single bond	Sub-5
1-1286	Sub-41	3,4-diClPh	CO	Single bond	Sub-6
1-1287	Sub-41	3,4-diClPh	CO	Single bond	Sub-7
1-1288	Sub-41	3,4-diClPh	CO	Single bond	Sub-8
1-1289	Sub-41	3,4-diClPh	CO	Single bond	Sub-9
1-1290	Sub-41	3,4-diClPh	CO	Single bond	Sub-10
1-1291	Sub-41	3,4-diClPh	CO	Single bond	Sub-11
1-1292	Sub-41	3,4-diClPh	CO	Single bond	Sub-12
1-1293	Sub-41	3,4-diClPh	CO	Single bond	Sub-13
1-1294	Sub-41	3,4-diClPh	CO	Single bond	Sub-14
1-1295	Sub-41	3,4-diClPh	CO	Single bond	Sub-15
1-1296	Sub-41	3,4-diClPh	CO	Single bond	Sub-16
1-1297	Sub-41	3,4-diClPh	CO	Single bond	Sub-17
1-1298	Sub-41	3,4-diClPh	CO	Single bond	Sub-18
1-1299	Sub-41	3,4-diClPh	CO	Single bond	Sub-19
1-1300	Sub-41	3,4-diClPh	CO	Single bond	Sub-20

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1301	Sub-41	3,4-diCIPh	CO	Single bond	Sub-21
1-1302	Sub-41	3,4-diCIPh	CO	Single bond	Sub-22
1-1303	Sub-41	3,4-diCIPh	CO	Single bond	Sub-23
1-1304	Sub-41	3,4-diCIPh	CO	Single bond	Sub-24
1-1305	Sub-41	3,4-diCIPh	CO	Single bond	Sub-25
1-1306	Sub-41	3,4-diCIPh	CO	Single bond	Sub-26
1-1307	Sub-41	3,4-diCIPh	CO	Single bond	Sub-27
1-1308	Sub-41	3,4-diCIPh	CO	Single bond	Sub-28
1-1309	Sub-41	3,4-diCIPh	CO	Single bond	Sub-29
1-1310	Sub-41	3,4-diCIPh	CO	Single bond	Sub-30
1-1311	Sub-41	3,4-diCIPh	CO	Single bond	Sub-31
1-1312	Sub-41	3,4-diCIPh	CO	Single bond	Sub-32
1-1313	Sub-42	3,4-diCIPh	CO	Single bond	Sub-1
1-1314	Sub-42	3,4-diCIPh	CO	Single bond	Sub-2
1-1315	Sub-42	3,4-diCIPh	CO	Single bond	Sub-3
1-1316	Sub-42	3,4-diCIPh	CO	Single bond	Sub-4
1-1317	Sub-42	3,4-diCIPh	CO	Single bond	Sub-5
1-1318	Sub-42	3,4-diCIPh	CO	Single bond	Sub-6
1-1319	Sub-42	3,4-diCIPh	CO	Single bond	Sub-7
1-1320	Sub-42	3,4-diCIPh	CO	Single bond	Sub-8
1-1321	Sub-42	3,4-diCIPh	CO	Single bond	Sub-9
1-1322	Sub-42	3,4-diCIPh	CO	Single bond	Sub-10
1-1323	Sub-42	3,4-diCIPh	CO	Single bond	Sub-11
1-1324	Sub-42	3,4-diCIPh	CO	Single bond	Sub-12
1-1325	Sub-42	3,4-diCIPh	CO	Single bond	Sub-13
1-1326	Sub-42	3,4-diCIPh	CO	Single bond	Sub-14

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1327	Sub-42	3,4-diClPh	CO	Single bond	Sub-15
1-1328	Sub-42	3,4-diClPh	CO	Single bond	Sub-16
1-1329	Sub-42	3,4-diClPh	CO	Single bond	Sub-17
1-1330	Sub-42	3,4-diClPh	CO	Single bond	Sub-18
1-1331	Sub-42	3,4-diClPh	CO	Single bond	Sub-19
1-1332	Sub-42	3,4-diClPh	CO	Single bond	Sub-20
1-1333	Sub-42	3,4-diClPh	CO	Single bond	Sub-21
1-1334	Sub-42	3,4-diClPh	CO	Single bond	Sub-22
1-1335	Sub-42	3,4-diClPh	CO	Single bond	Sub-23
1-1336	Sub-42	3,4-diClPh	CO	Single bond	Sub-24
1-1337	Sub-42	3,4-diClPh	CO	Single bond	Sub-25
1-1338	Sub-42	3,4-diClPh	CO	Single bond	Sub-26
1-1339	Sub-42	3,4-diClPh	CO	Single bond	Sub-27
1-1340	Sub-42	3,4-diClPh	CO	Single bond	Sub-28
1-1341	Sub-42	3,4-diClPh	CO	Single bond	Sub-29
1-1342	Sub-42	3,4-diClPh	CO	Single bond	Sub-30
1-1343	Sub-42	3,4-diClPh	CO	Single bond	Sub-31
1-1344	Sub-42	3,4-diClPh	CO	Single bond	Sub-32
1-1345	Sub-43	3,4-diClPh	CO	Single bond	Sub-1
1-1346	Sub-43	3,4-diClPh	CO	Single bond	Sub-2
1-1347	Sub-43	3,4-diClPh	CO	Single bond	Sub-3
1-1348	Sub-43	3,4-diClPh	CO	Single bond	Sub-4
1-1349	Sub-43	3,4-diClPh	CO	Single bond	Sub-5
1-1350	Sub-43	3,4-diClPh	CO	Single bond	Sub-6
1-1351	Sub-43	3,4-diClPh	CO	Single bond	Sub-7
1-1352	Sub-43	3,4-diClPh	CO	Single bond	Sub-8

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1353	Sub-43	3,4-diClPh	CO	Single bond	Sub-9
1-1354	Sub-43	3,4-diClPh	CO	Single bond	Sub-10
1-1355	Sub-43	3,4-diClPh	CO	Single bond	Sub-11
1-1356	Sub-43	3,4-diClPh	CO	Single bond	Sub-12
1-1357	Sub-43	3,4-diClPh	CO	Single bond	Sub-13
1-1358	Sub-43	3,4-diClPh	CO	Single bond	Sub-14
1-1359	Sub-43	3,4-diClPh	CO	Single bond	Sub-15
1-1360	Sub-43	3,4-diClPh	CO	Single bond	Sub-16
1-1361	Sub-43	3,4-diClPh	CO	Single bond	Sub-17
1-1362	Sub-43	3,4-diClPh	CO	Single bond	Sub-18
1-1363	Sub-43	3,4-diClPh	CO	Single bond	Sub-19
1-1364	Sub-43	3,4-diClPh	CO	Single bond	Sub-20
1-1365	Sub-43	3,4-diClPh	CO	Single bond	Sub-21
1-1366	Sub-43	3,4-diClPh	CO	Single bond	Sub-22
1-1367	Sub-43	3,4-diClPh	CO	Single bond	Sub-23
1-1368	Sub-43	3,4-diClPh	CO	Single bond	Sub-24
1-1369	Sub-43	3,4-diClPh	CO	Single bond	Sub-25
1-1370	Sub-43	3,4-diClPh	CO	Single bond	Sub-26
1-1371	Sub-43	3,4-diClPh	CO	Single bond	Sub-27
1-1372	Sub-43	3,4-diClPh	CO	Single bond	Sub-28
1-1373	Sub-43	3,4-diClPh	CO	Single bond	Sub-29
1-1374	Sub-43	3,4-diClPh	CO	Single bond	Sub-30
1-1375	Sub-43	3,4-diClPh	CO	Single bond	Sub-31
1-1376	Sub-43	3,4-diClPh	CO	Single bond	Sub-32
1-1377	Sub-44	3,4-diClPh	CO	Single bond	Sub-1
1-1378	Sub-44	3,4-diClPh	CO	Single bond	Sub-2

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1379	Sub-44	3,4-diClPh	CO	Single bond	Sub-3
1-1380	Sub-44	3,4-diClPh	CO	Single bond	Sub-4
1-1381	Sub-44	3,4-diClPh	CO	Single bond	Sub-5
1-1382	Sub-44	3,4-diClPh	CO	Single bond	Sub-6
1-1383	Sub-44	3,4-diClPh	CO	Single bond	Sub-7
1-1384	Sub-44	3,4-diClPh	CO	Single bond	Sub-8
1-1385	Sub-44	3,4-diClPh	CO	Single bond	Sub-9
1-1386	Sub-44	3,4-diClPh	CO	Single bond	Sub-10
1-1387	Sub-44	3,4-diClPh	CO	Single bond	Sub-11
1-1388	Sub-44	3,4-diClPh	CO	Single bond	Sub-12
1-1389	Sub-44	3,4-diClPh	CO	Single bond	Sub-13
1-1390	Sub-44	3,4-diClPh	CO	Single bond	Sub-14
1-1391	Sub-44	3,4-diClPh	CO	Single bond	Sub-15
1-1392	Sub-44	3,4-diClPh	CO	Single bond	Sub-16
1-1393	Sub-44	3,4-diClPh	CO	Single bond	Sub-17
1-1394	Sub-44	3,4-diClPh	CO	Single bond	Sub-18
1-1395	Sub-44	3,4-diClPh	CO	Single bond	Sub-19
1-1396	Sub-44	3,4-diClPh	CO	Single bond	Sub-20
1-1397	Sub-44	3,4-diClPh	CO	Single bond	Sub-21
1-1398	Sub-44	3,4-diClPh	CO	Single bond	Sub-22
1-1399	Sub-44	3,4-diClPh	CO	Single bond	Sub-23
1-1400	Sub-44	3,4-diClPh	CO	Single bond	Sub-24
1-1401	Sub-44	3,4-diClPh	CO	Single bond	Sub-25
1-1402	Sub-44	3,4-diClPh	CO	Single bond	Sub-26
1-1403	Sub-44	3,4-diClPh	CO	Single bond	Sub-27
1-1404	Sub-44	3,4-diClPh	CO	Single bond	Sub-28

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1405	Sub-44	3,4-diCIPh	CO	Single bond	Sub-29
1-1406	Sub-44	3,4-diCIPh	CO	Single bond	Sub-30
1-1407	Sub-44	3,4-diCIPh	CO	Single bond	Sub-31
1-1408	Sub-44	3,4-diCIPh	CO	Single bond	Sub-32
1-1409	Sub-45	3,4-diCIPh	CO	Single bond	Sub-1
1-1410	Sub-45	3,4-diCIPh	CO	Single bond	Sub-2
1-1411	Sub-45	3,4-diCIPh	CO	Single bond	Sub-3
1-1412	Sub-45	3,4-diCIPh	CO	Single bond	Sub-4
1-1413	Sub-45	3,4-diCIPh	CO	Single bond	Sub-5
1-1414	Sub-45	3,4-diCIPh	CO	Single bond	Sub-6
1-1415	Sub-45	3,4-diCIPh	CO	Single bond	Sub-7
1-1416	Sub-45	3,4-diCIPh	CO	Single bond	Sub-8
1-1417	Sub-45	3,4-diCIPh	CO	Single bond	Sub-9
1-1418	Sub-45	3,4-diCIPh	CO	Single bond	Sub-10
1-1419	Sub-45	3,4-diCIPh	CO	Single bond	Sub-11
1-1420	Sub-45	3,4-diCIPh	CO	Single bond	Sub-12
1-1421	Sub-45	3,4-diCIPh	CO	Single bond	Sub-13
1-1422	Sub-45	3,4-diCIPh	CO	Single bond	Sub-14
1-1423	Sub-45	3,4-diCIPh	CO	Single bond	Sub-15
1-1424	Sub-45	3,4-diCIPh	CO	Single bond	Sub-16
1-1425	Sub-45	3,4-diCIPh	CO	Single bond	Sub-17
1-1426	Sub-45	3,4-diCIPh	CO	Single bond	Sub-18
1-1427	Sub-45	3,4-diCIPh	CO	Single bond	Sub-19
1-1428	Sub-45	3,4-diCIPh	CO	Single bond	Sub-20
1-1429	Sub-45	3,4-diCIPh	CO	Single bond	Sub-21
1-1430	Sub-45	3,4-diCIPh	CO	Single bond	Sub-22

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1431	Sub-45	3,4-diClPh	CO	Single bond	Sub-23
1-1432	Sub-45	3,4-diClPh	CO	Single bond	Sub-24
1-1433	Sub-45	3,4-diClPh	CO	Single bond	Sub-25
1-1434	Sub-45	3,4-diClPh	CO	Single bond	Sub-26
1-1435	Sub-45	3,4-diClPh	CO	Single bond	Sub-27
1-1436	Sub-45	3,4-diClPh	CO	Single bond	Sub-28
1-1437	Sub-45	3,4-diClPh	CO	Single bond	Sub-29
1-1438	Sub-45	3,4-diClPh	CO	Single bond	Sub-30
1-1439	Sub-45	3,4-diClPh	CO	Single bond	Sub-31
1-1440	Sub-45	3,4-diClPh	CO	Single bond	Sub-32
1-1441	Sub-46	3,4-diClPh	CO	Single bond	Sub-1
1-1442	Sub-46	3,4-diClPh	CO	Single bond	Sub-2
1-1443	Sub-46	3,4-diClPh	CO	Single bond	Sub-3
1-1444	Sub-46	3,4-diClPh	CO	Single bond	Sub-4
1-1445	Sub-46	3,4-diClPh	CO	Single bond	Sub-5
1-1446	Sub-46	3,4-diClPh	CO	Single bond	Sub-6
1-1447	Sub-46	3,4-diClPh	CO	Single bond	Sub-7
1-1448	Sub-46	3,4-diClPh	CO	Single bond	Sub-8
1-1449	Sub-46	3,4-diClPh	CO	Single bond	Sub-9
1-1450	Sub-46	3,4-diClPh	CO	Single bond	Sub-10
1-1451	Sub-46	3,4-diClPh	CO	Single bond	Sub-11
1-1452	Sub-46	3,4-diClPh	CO	Single bond	Sub-12
1-1453	Sub-46	3,4-diClPh	CO	Single bond	Sub-13
1-1454	Sub-46	3,4-diClPh	CO	Single bond	Sub-14
1-1455	Sub-46	3,4-diClPh	CO	Single bond	Sub-15
1-1456	Sub-46	3,4-diClPh	CO	Single bond	Sub-16

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1457	Sub-46	3,4-diClPh	CO	Single bond	Sub-17
1-1458	Sub-46	3,4-diClPh	CO	Single bond	Sub-18
1-1459	Sub-46	3,4-diClPh	CO	Single bond	Sub-19
1-1460	Sub-46	3,4-diClPh	CO	Single bond	Sub-20
1-1461	Sub-46	3,4-diClPh	CO	Single bond	Sub-21
1-1462	Sub-46	3,4-diClPh	CO	Single bond	Sub-22
1-1463	Sub-46	3,4-diClPh	CO	Single bond	Sub-23
1-1464	Sub-46	3,4-diClPh	CO	Single bond	Sub-24
1-1465	Sub-46	3,4-diClPh	CO	Single bond	Sub-25
1-1466	Sub-46	3,4-diClPh	CO	Single bond	Sub-26
1-1467	Sub-46	3,4-diClPh	CO	Single bond	Sub-27
1-1468	Sub-46	3,4-diClPh	CO	Single bond	Sub-28
1-1469	Sub-46	3,4-diClPh	CO	Single bond	Sub-29
1-1470	Sub-46	3,4-diClPh	CO	Single bond	Sub-30
1-1471	Sub-46	3,4-diClPh	CO	Single bond	Sub-31
1-1472	Sub-46	3,4-diClPh	CO	Single bond	Sub-32
1-1473	Sub-47	3,4-diClPh	CO	Single bond	Sub-1
1-1474	Sub-47	3,4-diClPh	CO	Single bond	Sub-2
1-1475	Sub-47	3,4-diClPh	CO	Single bond	Sub-3
1-1476	Sub-47	3,4-diClPh	CO	Single bond	Sub-4
1-1477	Sub-47	3,4-diClPh	CO	Single bond	Sub-5
1-1478	Sub-47	3,4-diClPh	CO	Single bond	Sub-6
1-1479	Sub-47	3,4-diClPh	CO	Single bond	Sub-7
1-1480	Sub-47	3,4-diClPh	CO	Single bond	Sub-8
1-1481	Sub-47	3,4-diClPh	CO	Single bond	Sub-9
1-1482	Sub-47	3,4-diClPh	CO	Single bond	Sub-10

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1483	Sub-47	3,4-diCIPh	CO	Single bond	Sub-11
1-1484	Sub-47	3,4-diCIPh	CO	Single bond	Sub-12
1-1485	Sub-47	3,4-diCIPh	CO	Single bond	Sub-13
1-1486	Sub-47	3,4-diCIPh	CO	Single bond	Sub-14
1-1487	Sub-47	3,4-diCIPh	CO	Single bond	Sub-15
1-1488	Sub-47	3,4-diCIPh	CO	Single bond	Sub-16
1-1489	Sub-47	3,4-diCIPh	CO	Single bond	Sub-17
1-1490	Sub-47	3,4-diCIPh	CO	Single bond	Sub-18
1-1491	Sub-47	3,4-diCIPh	CO	Single bond	Sub-19
1-1492	Sub-47	3,4-diCIPh	CO	Single bond	Sub-20
1-1493	Sub-47	3,4-diCIPh	CO	Single bond	Sub-21
1-1494	Sub-47	3,4-diCIPh	CO	Single bond	Sub-22
1-1495	Sub-47	3,4-diCIPh	CO	Single bond	Sub-23
1-1496	Sub-47	3,4-diCIPh	CO	Single bond	Sub-24
1-1497	Sub-47	3,4-diCIPh	CO	Single bond	Sub-25
1-1498	Sub-47	3,4-diCIPh	CO	Single bond	Sub-26
1-1499	Sub-47	3,4-diCIPh	CO	Single bond	Sub-27
1-1500	Sub-47	3,4-diCIPh	CO	Single bond	Sub-28
1-1501	Sub-47	3,4-diCIPh	CO	Single bond	Sub-29
1-1502	Sub-47	3,4-diCIPh	CO	Single bond	Sub-30
1-1503	Sub-47	3,4-diCIPh	CO	Single bond	Sub-31
1-1504	Sub-47	3,4-diCIPh	CO	Single bond	Sub-32
1-1505	Sub-48	3,4-diCIPh	CO	Single bond	Sub-1
1-1506	Sub-48	3,4-diCIPh	CO	Single bond	Sub-2
1-1507	Sub-48	3,4-diCIPh	CO	Single bond	Sub-3
1-1508	Sub-48	3,4-diCIPh	CO	Single bond	Sub-4

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1509	Sub-48	3,4-diCIPh	CO	Single bond	Sub-5
1-1510	Sub-48	3,4-diCIPh	CO	Single bond	Sub-6
1-1511	Sub-48	3,4-diCIPh	CO	Single bond	Sub-7
1-1512	Sub-48	3,4-diCIPh	CO	Single bond	Sub-8
1-1513	Sub-48	3,4-diCIPh	CO	Single bond	Sub-9
1-1514	Sub-48	3,4-diCIPh	CO	Single bond	Sub-10
1-1515	Sub-48	3,4-diCIPh	CO	Single bond	Sub-11
1-1516	Sub-48	3,4-diCIPh	CO	Single bond	Sub-12
1-1517	Sub-48	3,4-diCIPh	CO	Single bond	Sub-13
1-1518	Sub-48	3,4-diCIPh	CO	Single bond	Sub-14
1-1519	Sub-48	3,4-diCIPh	CO	Single bond	Sub-15
1-1520	Sub-48	3,4-diCIPh	CO	Single bond	Sub-16
1-1521	Sub-48	3,4-diCIPh	CO	Single bond	Sub-17
1-1522	Sub-48	3,4-diCIPh	CO	Single bond	Sub-18
1-1523	Sub-48	3,4-diCIPh	CO	Single bond	Sub-19
1-1524	Sub-48	3,4-diCIPh	CO	Single bond	Sub-20
1-1525	Sub-48	3,4-diCIPh	CO	Single bond	Sub-21
1-1526	Sub-48	3,4-diCIPh	CO	Single bond	Sub-22
1-1527	Sub-48	3,4-diCIPh	CO	Single bond	Sub-23
1-1528	Sub-48	3,4-diCIPh	CO	Single bond	Sub-24
1-1529	Sub-48	3,4-diCIPh	CO	Single bond	Sub-25
1-1530	Sub-48	3,4-diCIPh	CO	Single bond	Sub-26
1-1531	Sub-48	3,4-diCIPh	CO	Single bond	Sub-27
1-1532	Sub-48	3,4-diCIPh	CO	Single bond	Sub-28
1-1533	Sub-48	3,4-diCIPh	CO	Single bond	Sub-29
1-1534	Sub-48	3,4-diCIPh	CO	Single bond	Sub-30

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1535	Sub-48	3,4-diCIPh	CO	Single bond	Sub-31
1-1536	Sub-48	3,4-diCIPh	CO	Single bond	Sub-32
1-1537	Sub-49	3,4-diCIPh	CO	Single bond	Sub-1
1-1538	Sub-49	3,4-diCIPh	CO	Single bond	Sub-2
1-1539	Sub-49	3,4-diCIPh	CO	Single bond	Sub-3
1-1540	Sub-49	3,4-diCIPh	CO	Single bond	Sub-4
1-1541	Sub-49	3,4-diCIPh	CO	Single bond	Sub-5
1-1542	Sub-49	3,4-diCIPh	CO	Single bond	Sub-6
1-1543	Sub-49	3,4-diCIPh	CO	Single bond	Sub-7
1-1544	Sub-49	3,4-diCIPh	CO	Single bond	Sub-8
1-1545	Sub-49	3,4-diCIPh	CO	Single bond	Sub-9
1-1546	Sub-49	3,4-diCIPh	CO	Single bond	Sub-10
1-1547	Sub-49	3,4-diCIPh	CO	Single bond	Sub-11
1-1548	Sub-49	3,4-diCIPh	CO	Single bond	Sub-12
1-1549	Sub-49	3,4-diCIPh	CO	Single bond	Sub-13
1-1550	Sub-49	3,4-diCIPh	CO	Single bond	Sub-14
1-1551	Sub-49	3,4-diCIPh	CO	Single bond	Sub-15
1-1552	Sub-49	3,4-diCIPh	CO	Single bond	Sub-16
1-1553	Sub-49	3,4-diCIPh	CO	Single bond	Sub-17
1-1554	Sub-49	3,4-diCIPh	CO	Single bond	Sub-18
1-1555	Sub-49	3,4-diCIPh	CO	Single bond	Sub-19
1-1556	Sub-49	3,4-diCIPh	CO	Single bond	Sub-20
1-1557	Sub-49	3,4-diCIPh	CO	Single bond	Sub-21
1-1558	Sub-49	3,4-diCIPh	CO	Single bond	Sub-22
1-1559	Sub-49	3,4-diCIPh	CO	Single bond	Sub-23
1-1560	Sub-49	3,4-diCIPh	CO	Single bond	Sub-24

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1561	Sub-49	3,4-diCIPh	CO	Single bond	Sub-25
1-1562	Sub-49	3,4-diCIPh	CO	Single bond	Sub-26
1-1563	Sub-49	3,4-diCIPh	CO	Single bond	Sub-27
1-1564	Sub-49	3,4-diCIPh	CO	Single bond	Sub-28
1-1565	Sub-49	3,4-diCIPh	CO	Single bond	Sub-29
1-1566	Sub-49	3,4-diCIPh	CO	Single bond	Sub-30
1-1567	Sub-49	3,4-diCIPh	CO	Single bond	Sub-31
1-1568	Sub-49	3,4-diCIPh	CO	Single bond	Sub-32
1-1569	Sub-50	3,4-diCIPh	CO	Single bond	Sub-1
1-1570	Sub-50	3,4-diCIPh	CO	Single bond	Sub-2
1-1571	Sub-50	3,4-diCIPh	CO	Single bond	Sub-3
1-1572	Sub-50	3,4-diCIPh	CO	Single bond	Sub-4
1-1573	Sub-50	3,4-diCIPh	CO	Single bond	Sub-5
1-1574	Sub-50	3,4-diCIPh	CO	Single bond	Sub-6
1-1575	Sub-50	3,4-diCIPh	CO	Single bond	Sub-7
1-1576	Sub-50	3,4-diCIPh	CO	Single bond	Sub-8
1-1577	Sub-50	3,4-diCIPh	CO	Single bond	Sub-9
1-1578	Sub-50	3,4-diCIPh	CO	Single bond	Sub-10
1-1579	Sub-50	3,4-diCIPh	CO	Single bond	Sub-11
1-1580	Sub-50	3,4-diCIPh	CO	Single bond	Sub-12
1-1581	Sub-50	3,4-diCIPh	CO	Single bond	Sub-13
1-1582	Sub-50	3,4-diCIPh	CO	Single bond	Sub-14
1-1583	Sub-50	3,4-diCIPh	CO	Single bond	Sub-15
1-1584	Sub-50	3,4-diCIPh	CO	Single bond	Sub-16
1-1585	Sub-50	3,4-diCIPh	CO	Single bond	Sub-17
1-1586	Sub-50	3,4-diCIPh	CO	Single bond	Sub-18

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1587	Sub-50	3,4-diClPh	CO	Single bond	Sub-19
1-1588	Sub-50	3,4-diClPh	CO	Single bond	Sub-20
1-1589	Sub-50	3,4-diClPh	CO	Single bond	Sub-21
1-1590	Sub-50	3,4-diClPh	CO	Single bond	Sub-22
1-1591	Sub-50	3,4-diClPh	CO	Single bond	Sub-23
1-1592	Sub-50	3,4-diClPh	CO	Single bond	Sub-24
1-1593	Sub-50	3,4-diClPh	CO	Single bond	Sub-25
1-1594	Sub-50	3,4-diClPh	CO	Single bond	Sub-26
1-1595	Sub-50	3,4-diClPh	CO	Single bond	Sub-27
1-1596	Sub-50	3,4-diClPh	CO	Single bond	Sub-28
1-1597	Sub-50	3,4-diClPh	CO	Single bond	Sub-29
1-1598	Sub-50	3,4-diClPh	CO	Single bond	Sub-30
1-1599	Sub-50	3,4-diClPh	CO	Single bond	Sub-31
1-1600	Sub-50	3,4-diClPh	CO	Single bond	Sub-32
1-1601	Sub-51	3,4-diClPh	CO	Single bond	Sub-1
1-1602	Sub-51	3,4-diClPh	CO	Single bond	Sub-2
1-1603	Sub-51	3,4-diClPh	CO	Single bond	Sub-3
1-1604	Sub-51	3,4-diClPh	CO	Single bond	Sub-4
1-1605	Sub-51	3,4-diClPh	CO	Single bond	Sub-5
1-1606	Sub-51	3,4-diClPh	CO	Single bond	Sub-6
1-1607	Sub-51	3,4-diClPh	CO	Single bond	Sub-7
1-1608	Sub-51	3,4-diClPh	CO	Single bond	Sub-8
1-1609	Sub-51	3,4-diClPh	CO	Single bond	Sub-9
1-1610	Sub-51	3,4-diClPh	CO	Single bond	Sub-10
1-1611	Sub-51	3,4-diClPh	CO	Single bond	Sub-11
1-1612	Sub-51	3,4-diClPh	CO	Single bond	Sub-12

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1613	Sub-51	3,4-diCIPh	CO	Single bond	Sub-13
1-1614	Sub-51	3,4-diCIPh	CO	Single bond	Sub-14
1-1615	Sub-51	3,4-diCIPh	CO	Single bond	Sub-15
1-1616	Sub-51	3,4-diCIPh	CO	Single bond	Sub-16
1-1617	Sub-51	3,4-diCIPh	CO	Single bond	Sub-17
1-1618	Sub-51	3,4-diCIPh	CO	Single bond	Sub-18
1-1619	Sub-51	3,4-diCIPh	CO	Single bond	Sub-19
1-1620	Sub-51	3,4-diCIPh	CO	Single bond	Sub-20
1-1621	Sub-51	3,4-diCIPh	CO	Single bond	Sub-21
1-1622	Sub-51	3,4-diCIPh	CO	Single bond	Sub-22
1-1623	Sub-51	3,4-diCIPh	CO	Single bond	Sub-23
1-1624	Sub-51	3,4-diCIPh	CO	Single bond	Sub-24
1-1625	Sub-51	3,4-diCIPh	CO	Single bond	Sub-25
1-1626	Sub-51	3,4-diCIPh	CO	Single bond	Sub-26
1-1627	Sub-51	3,4-diCIPh	CO	Single bond	Sub-27
1-1628	Sub-51	3,4-diCIPh	CO	Single bond	Sub-28
1-1629	Sub-51	3,4-diCIPh	CO	Single bond	Sub-29
1-1630	Sub-51	3,4-diCIPh	CO	Single bond	Sub-30
1-1631	Sub-51	3,4-diCIPh	CO	Single bond	Sub-31
1-1632	Sub-51	3,4-diCIPh	CO	Single bond	Sub-32
1-1633	Sub-52	3,4-diCIPh	CO	Single bond	Sub-1
1-1634	Sub-52	3,4-diCIPh	CO	Single bond	Sub-2
1-1635	Sub-52	3,4-diCIPh	CO	Single bond	Sub-3
1-1636	Sub-52	3,4-diCIPh	CO	Single bond	Sub-4
1-1637	Sub-52	3,4-diCIPh	CO	Single bond	Sub-5
1-1638	Sub-52	3,4-diCIPh	CO	Single bond	Sub-6

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1639	Sub-52	3,4-diClPh	CO	Single bond	Sub-7
1-1640	Sub-52	3,4-diClPh	CO	Single bond	Sub-8
1-1641	Sub-52	3,4-diClPh	CO	Single bond	Sub-9
1-1642	Sub-52	3,4-diClPh	CO	Single bond	Sub-10
1-1643	Sub-52	3,4-diClPh	CO	Single bond	Sub-11
1-1644	Sub-52	3,4-diClPh	CO	Single bond	Sub-12
1-1645	Sub-52	3,4-diClPh	CO	Single bond	Sub-13
1-1646	Sub-52	3,4-diClPh	CO	Single bond	Sub-14
1-1647	Sub-52	3,4-diClPh	CO	Single bond	Sub-15
1-1648	Sub-52	3,4-diClPh	CO	Single bond	Sub-16
1-1649	Sub-52	3,4-diClPh	CO	Single bond	Sub-17
1-1650	Sub-52	3,4-diClPh	CO	Single bond	Sub-18
1-1651	Sub-52	3,4-diClPh	CO	Single bond	Sub-19
1-1652	Sub-52	3,4-diClPh	CO	Single bond	Sub-20
1-1653	Sub-52	3,4-diClPh	CO	Single bond	Sub-21
1-1654	Sub-52	3,4-diClPh	CO	Single bond	Sub-22
1-1655	Sub-52	3,4-diClPh	CO	Single bond	Sub-23
1-1656	Sub-52	3,4-diClPh	CO	Single bond	Sub-24
1-1657	Sub-52	3,4-diClPh	CO	Single bond	Sub-25
1-1658	Sub-52	3,4-diClPh	CO	Single bond	Sub-26
1-1659	Sub-52	3,4-diClPh	CO	Single bond	Sub-27
1-1660	Sub-52	3,4-diClPh	CO	Single bond	Sub-28
1-1661	Sub-52	3,4-diClPh	CO	Single bond	Sub-29
1-1662	Sub-52	3,4-diClPh	CO	Single bond	Sub-30
1-1663	Sub-52	3,4-diClPh	CO	Single bond	Sub-31
1-1664	Sub-52	3,4-diClPh	CO	Single bond	Sub-32

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1665	Sub-53	3,4-diClPh	CO	Single bond	Sub-1
1-1666	Sub-53	3,4-diClPh	CO	Single bond	Sub-2
1-1667	Sub-53	3,4-diClPh	CO	Single bond	Sub-3
1-1668	Sub-53	3,4-diClPh	CO	Single bond	Sub-4
1-1669	Sub-53	3,4-diClPh	CO	Single bond	Sub-5
1-1670	Sub-53	3,4-diClPh	CO	Single bond	Sub-6
1-1671	Sub-53	3,4-diClPh	CO	Single bond	Sub-7
1-1672	Sub-53	3,4-diClPh	CO	Single bond	Sub-8
1-1673	Sub-53	3,4-diClPh	CO	Single bond	Sub-9
1-1674	Sub-53	3,4-diClPh	CO	Single bond	Sub-10
1-1675	Sub-53	3,4-diClPh	CO	Single bond	Sub-11
1-1676	Sub-53	3,4-diClPh	CO	Single bond	Sub-12
1-1677	Sub-53	3,4-diClPh	CO	Single bond	Sub-13
1-1678	Sub-53	3,4-diClPh	CO	Single bond	Sub-14
1-1679	Sub-53	3,4-diClPh	CO	Single bond	Sub-15
1-1680	Sub-53	3,4-diClPh	CO	Single bond	Sub-16
1-1681	Sub-53	3,4-diClPh	CO	Single bond	Sub-17
1-1682	Sub-53	3,4-diClPh	CO	Single bond	Sub-18
1-1683	Sub-53	3,4-diClPh	CO	Single bond	Sub-19
1-1684	Sub-53	3,4-diClPh	CO	Single bond	Sub-20
1-1685	Sub-53	3,4-diClPh	CO	Single bond	Sub-21
1-1686	Sub-53	3,4-diClPh	CO	Single bond	Sub-22
1-1687	Sub-53	3,4-diClPh	CO	Single bond	Sub-23
1-1688	Sub-53	3,4-diClPh	CO	Single bond	Sub-24
1-1689	Sub-53	3,4-diClPh	CO	Single bond	Sub-25
1-1690	Sub-53	3,4-diClPh	CO	Single bond	Sub-26

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1691	Sub-53	3,4-diClPh	CO	Single bond	Sub-27
1-1692	Sub-53	3,4-diClPh	CO	Single bond	Sub-28
1-1693	Sub-53	3,4-diClPh	CO	Single bond	Sub-29
1-1694	Sub-53	3,4-diClPh	CO	Single bond	Sub-30
1-1695	Sub-53	3,4-diClPh	CO	Single bond	Sub-31
1-1696	Sub-53	3,4-diClPh	CO	Single bond	Sub-32
1-1697	Sub-54	3,4-diClPh	CO	Single bond	Sub-1
1-1698	Sub-54	3,4-diClPh	CO	Single bond	Sub-2
1-1699	Sub-54	3,4-diClPh	CO	Single bond	Sub-3
1-1700	Sub-54	3,4-diClPh	CO	Single bond	Sub-4
1-1701	Sub-54	3,4-diClPh	CO	Single bond	Sub-5
1-1702	Sub-54	3,4-diClPh	CO	Single bond	Sub-6
1-1703	Sub-54	3,4-diClPh	CO	Single bond	Sub-7
1-1704	Sub-54	3,4-diClPh	CO	Single bond	Sub-8
1-1705	Sub-54	3,4-diClPh	CO	Single bond	Sub-9
1-1706	Sub-54	3,4-diClPh	CO	Single bond	Sub-10
1-1707	Sub-54	3,4-diClPh	CO	Single bond	Sub-11
1-1708	Sub-54	3,4-diClPh	CO	Single bond	Sub-12
1-1709	Sub-54	3,4-diClPh	CO	Single bond	Sub-13
1-1710	Sub-54	3,4-diClPh	CO	Single bond	Sub-14
1-1711	Sub-54	3,4-diClPh	CO	Single bond	Sub-15
1-1712	Sub-54	3,4-diClPh	CO	Single bond	Sub-16
1-1713	Sub-54	3,4-diClPh	CO	Single bond	Sub-17
1-1714	Sub-54	3,4-diClPh	CO	Single bond	Sub-18
1-1715	Sub-54	3,4-diClPh	CO	Single bond	Sub-19
1-1716	Sub-54	3,4-diClPh	CO	Single bond	Sub-20

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1717	Sub-54	3,4-diClPh	CO	Single bond	Sub-21
1-1718	Sub-54	3,4-diClPh	CO	Single bond	Sub-22
1-1719	Sub-54	3,4-diClPh	CO	Single bond	Sub-23
1-1720	Sub-54	3,4-diClPh	CO	Single bond	Sub-24
1-1721	Sub-54	3,4-diClPh	CO	Single bond	Sub-25
1-1722	Sub-54	3,4-diClPh	CO	Single bond	Sub-26
1-1723	Sub-54	3,4-diClPh	CO	Single bond	Sub-27
1-1724	Sub-54	3,4-diClPh	CO	Single bond	Sub-28
1-1725	Sub-54	3,4-diClPh	CO	Single bond	Sub-29
1-1726	Sub-54	3,4-diClPh	CO	Single bond	Sub-30
1-1727	Sub-54	3,4-diClPh	CO	Single bond	Sub-31
1-1728	Sub-54	3,4-diClPh	CO	Single bond	Sub-32
1-1729	Sub-55	3,4-diClPh	CO	Single bond	Sub-1
1-1730	Sub-55	3,4-diClPh	CO	Single bond	Sub-2
1-1731	Sub-55	3,4-diClPh	CO	Single bond	Sub-3
1-1732	Sub-55	3,4-diClPh	CO	Single bond	Sub-4
1-1733	Sub-55	3,4-diClPh	CO	Single bond	Sub-5
1-1734	Sub-55	3,4-diClPh	CO	Single bond	Sub-6
1-1735	Sub-55	3,4-diClPh	CO	Single bond	Sub-7
1-1736	Sub-55	3,4-diClPh	CO	Single bond	Sub-8
1-1737	Sub-55	3,4-diClPh	CO	Single bond	Sub-9
1-1738	Sub-55	3,4-diClPh	CO	Single bond	Sub-10
1-1739	Sub-55	3,4-diClPh	CO	Single bond	Sub-11
1-1740	Sub-55	3,4-diClPh	CO	Single bond	Sub-12
1-1741	Sub-55	3,4-diClPh	CO	Single bond	Sub-13
1-1742	Sub-55	3,4-diClPh	CO	Single bond	Sub-14

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1743	Sub-55	3,4-diClPh	CO	Single bond	Sub-15
1-1744	Sub-55	3,4-diClPh	CO	Single bond	Sub-16
1-1745	Sub-55	3,4-diClPh	CO	Single bond	Sub-17
1-1746	Sub-55	3,4-diClPh	CO	Single bond	Sub-18
1-1747	Sub-55	3,4-diClPh	CO	Single bond	Sub-19
1-1748	Sub-55	3,4-diClPh	CO	Single bond	Sub-20
1-1749	Sub-55	3,4-diClPh	CO	Single bond	Sub-21
1-1750	Sub-55	3,4-diClPh	CO	Single bond	Sub-22
1-1751	Sub-55	3,4-diClPh	CO	Single bond	Sub-23
1-1752	Sub-55	3,4-diClPh	CO	Single bond	Sub-24
1-1753	Sub-55	3,4-diClPh	CO	Single bond	Sub-25
1-1754	Sub-55	3,4-diClPh	CO	Single bond	Sub-26
1-1755	Sub-55	3,4-diClPh	CO	Single bond	Sub-27
1-1756	Sub-55	3,4-diClPh	CO	Single bond	Sub-28
1-1757	Sub-55	3,4-diClPh	CO	Single bond	Sub-29
1-1758	Sub-55	3,4-diClPh	CO	Single bond	Sub-30
1-1759	Sub-55	3,4-diClPh	CO	Single bond	Sub-31
1-1760	Sub-55	3,4-diClPh	CO	Single bond	Sub-32
1-1761	Sub-56	3,4-diClPh	CO	Single bond	Sub-1
1-1762	Sub-56	3,4-diClPh	CO	Single bond	Sub-2
1-1763	Sub-56	3,4-diClPh	CO	Single bond	Sub-3
1-1764	Sub-56	3,4-diClPh	CO	Single bond	Sub-4
1-1765	Sub-56	3,4-diClPh	CO	Single bond	Sub-5
1-1766	Sub-56	3,4-diClPh	CO	Single bond	Sub-6
1-1767	Sub-56	3,4-diClPh	CO	Single bond	Sub-7
1-1768	Sub-56	3,4-diClPh	CO	Single bond	Sub-8

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1769	Sub-56	3,4-diClPh	CO	Single bond	Sub-9
1-1770	Sub-56	3,4-diClPh	CO	Single bond	Sub-10
1-1771	Sub-56	3,4-diClPh	CO	Single bond	Sub-11
1-1772	Sub-56	3,4-diClPh	CO	Single bond	Sub-12
1-1773	Sub-56	3,4-diClPh	CO	Single bond	Sub-13
1-1774	Sub-56	3,4-diClPh	CO	Single bond	Sub-14
1-1775	Sub-56	3,4-diClPh	CO	Single bond	Sub-15
1-1776	Sub-56	3,4-diClPh	CO	Single bond	Sub-16
1-1777	Sub-56	3,4-diClPh	CO	Single bond	Sub-17
1-1778	Sub-56	3,4-diClPh	CO	Single bond	Sub-18
1-1779	Sub-56	3,4-diClPh	CO	Single bond	Sub-19
1-1780	Sub-56	3,4-diClPh	CO	Single bond	Sub-20
1-1781	Sub-56	3,4-diClPh	CO	Single bond	Sub-21
1-1782	Sub-56	3,4-diClPh	CO	Single bond	Sub-22
1-1783	Sub-56	3,4-diClPh	CO	Single bond	Sub-23
1-1784	Sub-56	3,4-diClPh	CO	Single bond	Sub-24
1-1785	Sub-56	3,4-diClPh	CO	Single bond	Sub-25
1-1786	Sub-56	3,4-diClPh	CO	Single bond	Sub-26
1-1787	Sub-56	3,4-diClPh	CO	Single bond	Sub-27
1-1788	Sub-56	3,4-diClPh	CO	Single bond	Sub-28
1-1789	Sub-56	3,4-diClPh	CO	Single bond	Sub-29
1-1790	Sub-56	3,4-diClPh	CO	Single bond	Sub-30
1-1791	Sub-56	3,4-diClPh	CO	Single bond	Sub-31
1-1792	Sub-56	3,4-diClPh	CO	Single bond	Sub-32
1-1793	Sub-57	3,4-diClPh	CO	Single bond	Sub-1
1-1794	Sub-57	3,4-diClPh	CO	Single bond	Sub-2

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1795	Sub-57	3,4-diClPh	CO	Single bond	Sub-3
1-1796	Sub-57	3,4-diClPh	CO	Single bond	Sub-4
1-1797	Sub-57	3,4-diClPh	CO	Single bond	Sub-5
1-1798	Sub-57	3,4-diClPh	CO	Single bond	Sub-6
1-1799	Sub-57	3,4-diClPh	CO	Single bond	Sub-7
1-1800	Sub-57	3,4-diClPh	CO	Single bond	Sub-8
1-1801	Sub-57	3,4-diClPh	CO	Single bond	Sub-9
1-1802	Sub-57	3,4-diClPh	CO	Single bond	Sub-10
1-1803	Sub-57	3,4-diClPh	CO	Single bond	Sub-11
1-1804	Sub-57	3,4-diClPh	CO	Single bond	Sub-12
1-1805	Sub-57	3,4-diClPh	CO	Single bond	Sub-13
1-1806	Sub-57	3,4-diClPh	CO	Single bond	Sub-14
1-1807	Sub-57	3,4-diClPh	CO	Single bond	Sub-15
1-1808	Sub-57	3,4-diClPh	CO	Single bond	Sub-16
1-1809	Sub-57	3,4-diClPh	CO	Single bond	Sub-17
1-1810	Sub-57	3,4-diClPh	CO	Single bond	Sub-18
1-1811	Sub-57	3,4-diClPh	CO	Single bond	Sub-19
1-1812	Sub-57	3,4-diClPh	CO	Single bond	Sub-20
1-1813	Sub-57	3,4-diClPh	CO	Single bond	Sub-21
1-1814	Sub-57	3,4-diClPh	CO	Single bond	Sub-22
1-1815	Sub-57	3,4-diClPh	CO	Single bond	Sub-23
1-1816	Sub-57	3,4-diClPh	CO	Single bond	Sub-24
1-1817	Sub-57	3,4-diClPh	CO	Single bond	Sub-25
1-1818	Sub-57	3,4-diClPh	CO	Single bond	Sub-26
1-1819	Sub-57	3,4-diClPh	CO	Single bond	Sub-27
1-1820	Sub-57	3,4-diClPh	CO	Single bond	Sub-28

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1821	Sub-57	3,4-diClPh	CO	Single bond	Sub-29
1-1822	Sub-57	3,4-diClPh	CO	Single bond	Sub-30
1-1823	Sub-57	3,4-diClPh	CO	Single bond	Sub-31
1-1824	Sub-57	3,4-diClPh	CO	Single bond	Sub-32
1-1825	Sub-58	3,4-diClPh	CO	Single bond	Sub-1
1-1826	Sub-58	3,4-diClPh	CO	Single bond	Sub-2
1-1827	Sub-58	3,4-diClPh	CO	Single bond	Sub-3
1-1828	Sub-58	3,4-diClPh	CO	Single bond	Sub-4
1-1829	Sub-58	3,4-diClPh	CO	Single bond	Sub-5
1-1830	Sub-58	3,4-diClPh	CO	Single bond	Sub-6
1-1831	Sub-58	3,4-diClPh	CO	Single bond	Sub-7
1-1832	Sub-58	3,4-diClPh	CO	Single bond	Sub-8
1-1833	Sub-58	3,4-diClPh	CO	Single bond	Sub-9
1-1834	Sub-58	3,4-diClPh	CO	Single bond	Sub-10
1-1835	Sub-58	3,4-diClPh	CO	Single bond	Sub-11
1-1836	Sub-58	3,4-diClPh	CO	Single bond	Sub-12
1-1837	Sub-58	3,4-diClPh	CO	Single bond	Sub-13
1-1838	Sub-58	3,4-diClPh	CO	Single bond	Sub-14
1-1839	Sub-58	3,4-diClPh	CO	Single bond	Sub-15
1-1840	Sub-58	3,4-diClPh	CO	Single bond	Sub-16
1-1841	Sub-58	3,4-diClPh	CO	Single bond	Sub-17
1-1842	Sub-58	3,4-diClPh	CO	Single bond	Sub-18
1-1843	Sub-58	3,4-diClPh	CO	Single bond	Sub-19
1-1844	Sub-58	3,4-diClPh	CO	Single bond	Sub-20
1-1845	Sub-58	3,4-diClPh	CO	Single bond	Sub-21
1-1846	Sub-58	3,4-diClPh	CO	Single bond	Sub-22

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1847	Sub-58	3,4-diClPh	CO	Single bond	Sub-23
1-1848	Sub-58	3,4-diClPh	CO	Single bond	Sub-24
1-1849	Sub-58	3,4-diClPh	CO	Single bond	Sub-25
1-1850	Sub-58	3,4-diClPh	CO	Single bond	Sub-26
1-1851	Sub-58	3,4-diClPh	CO	Single bond	Sub-27
1-1852	Sub-58	3,4-diClPh	CO	Single bond	Sub-28
1-1853	Sub-58	3,4-diClPh	CO	Single bond	Sub-29
1-1854	Sub-58	3,4-diClPh	CO	Single bond	Sub-30
1-1855	Sub-58	3,4-diClPh	CO	Single bond	Sub-31
1-1856	Sub-58	3,4-diClPh	CO	Single bond	Sub-32
1-1857	Sub-59	3,4-diClPh	CO	Single bond	Sub-1
1-1858	Sub-59	3,4-diClPh	CO	Single bond	Sub-2
1-1859	Sub-59	3,4-diClPh	CO	Single bond	Sub-3
1-1860	Sub-59	3,4-diClPh	CO	Single bond	Sub-4
1-1861	Sub-59	3,4-diClPh	CO	Single bond	Sub-5
1-1862	Sub-59	3,4-diClPh	CO	Single bond	Sub-6
1-1863	Sub-59	3,4-diClPh	CO	Single bond	Sub-7
1-1864	Sub-59	3,4-diClPh	CO	Single bond	Sub-8
1-1865	Sub-59	3,4-diClPh	CO	Single bond	Sub-9
1-1866	Sub-59	3,4-diClPh	CO	Single bond	Sub-10
1-1867	Sub-59	3,4-diClPh	CO	Single bond	Sub-11
1-1868	Sub-59	3,4-diClPh	CO	Single bond	Sub-12
1-1869	Sub-59	3,4-diClPh	CO	Single bond	Sub-13
1-1870	Sub-59	3,4-diClPh	CO	Single bond	Sub-14
1-1871	Sub-59	3,4-diClPh	CO	Single bond	Sub-15
1-1872	Sub-59	3,4-diClPh	CO	Single bond	Sub-16

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1873	Sub-59	3,4-diClPh	CO	Single bond	Sub-17
1-1874	Sub-59	3,4-diClPh	CO	Single bond	Sub-18
1-1875	Sub-59	3,4-diClPh	CO	Single bond	Sub-19
1-1876	Sub-59	3,4-diClPh	CO	Single bond	Sub-20
1-1877	Sub-59	3,4-diClPh	CO	Single bond	Sub-21
1-1878	Sub-59	3,4-diClPh	CO	Single bond	Sub-22
1-1879	Sub-59	3,4-diClPh	CO	Single bond	Sub-23
1-1880	Sub-59	3,4-diClPh	CO	Single bond	Sub-24
1-1881	Sub-59	3,4-diClPh	CO	Single bond	Sub-25
1-1882	Sub-59	3,4-diClPh	CO	Single bond	Sub-26
1-1883	Sub-59	3,4-diClPh	CO	Single bond	Sub-27
1-1884	Sub-59	3,4-diClPh	CO	Single bond	Sub-28
1-1885	Sub-59	3,4-diClPh	CO	Single bond	Sub-29
1-1886	Sub-59	3,4-diClPh	CO	Single bond	Sub-30
1-1887	Sub-59	3,4-diClPh	CO	Single bond	Sub-31
1-1888	Sub-59	3,4-diClPh	CO	Single bond	Sub-32
1-1889	Sub-60	3,4-diClPh	CO	Single bond	Sub-1
1-1890	Sub-60	3,4-diClPh	CO	Single bond	Sub-2
1-1891	Sub-60	3,4-diClPh	CO	Single bond	Sub-3
1-1892	Sub-60	3,4-diClPh	CO	Single bond	Sub-4
1-1893	Sub-60	3,4-diClPh	CO	Single bond	Sub-5
1-1894	Sub-60	3,4-diClPh	CO	Single bond	Sub-6
1-1895	Sub-60	3,4-diClPh	CO	Single bond	Sub-7
1-1896	Sub-60	3,4-diClPh	CO	Single bond	Sub-8
1-1897	Sub-60	3,4-diClPh	CO	Single bond	Sub-9
1-1898	Sub-60	3,4-diClPh	CO	Single bond	Sub-10

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1899	Sub-60	3,4-diClPh	CO	Single bond	Sub-11
1-1900	Sub-60	3,4-diClPh	CO	Single bond	Sub-12
1-1901	Sub-60	3,4-diClPh	CO	Single bond	Sub-13
1-1902	Sub-60	3,4-diClPh	CO	Single bond	Sub-14
1-1903	Sub-60	3,4-diClPh	CO	Single bond	Sub-15
1-1904	Sub-60	3,4-diClPh	CO	Single bond	Sub-16
1-1905	Sub-60	3,4-diClPh	CO	Single bond	Sub-17
1-1906	Sub-60	3,4-diClPh	CO	Single bond	Sub-18
1-1907	Sub-60	3,4-diClPh	CO	Single bond	Sub-19
1-1908	Sub-60	3,4-diClPh	CO	Single bond	Sub-20
1-1909	Sub-60	3,4-diClPh	CO	Single bond	Sub-21
1-1910	Sub-60	3,4-diClPh	CO	Single bond	Sub-22
1-1911	Sub-60	3,4-diClPh	CO	Single bond	Sub-23
1-1912	Sub-60	3,4-diClPh	CO	Single bond	Sub-24
1-1913	Sub-60	3,4-diClPh	CO	Single bond	Sub-25
1-1914	Sub-60	3,4-diClPh	CO	Single bond	Sub-26
1-1915	Sub-60	3,4-diClPh	CO	Single bond	Sub-27
1-1916	Sub-60	3,4-diClPh	CO	Single bond	Sub-28
1-1917	Sub-60	3,4-diClPh	CO	Single bond	Sub-29
1-1918	Sub-60	3,4-diClPh	CO	Single bond	Sub-30
1-1919	Sub-60	3,4-diClPh	CO	Single bond	Sub-31
1-1920	Sub-60	3,4-diClPh	CO	Single bond	Sub-32
1-1921	Sub-61	3,4-diClPh	CO	Single bond	Sub-1
1-1922	Sub-61	3,4-diClPh	CO	Single bond	Sub-2
1-1923	Sub-61	3,4-diClPh	CO	Single bond	Sub-3
1-1924	Sub-61	3,4-diClPh	CO	Single bond	Sub-4

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1925	Sub-61	3,4-diCIPh	CO	Single bond	Sub-5
1-1926	Sub-61	3,4-diCIPh	CO	Single bond	Sub-6
1-1927	Sub-61	3,4-diCIPh	CO	Single bond	Sub-7
1-1928	Sub-61	3,4-diCIPh	CO	Single bond	Sub-8
1-1929	Sub-61	3,4-diCIPh	CO	Single bond	Sub-9
1-1930	Sub-61	3,4-diCIPh	CO	Single bond	Sub-10
1-1931	Sub-61	3,4-diCIPh	CO	Single bond	Sub-11
1-1932	Sub-61	3,4-diCIPh	CO	Single bond	Sub-12
1-1933	Sub-61	3,4-diCIPh	CO	Single bond	Sub-13
1-1934	Sub-61	3,4-diCIPh	CO	Single bond	Sub-14
1-1935	Sub-61	3,4-diCIPh	CO	Single bond	Sub-15
1-1936	Sub-61	3,4-diCIPh	CO	Single bond	Sub-16
1-1937	Sub-61	3,4-diCIPh	CO	Single bond	Sub-17
1-1938	Sub-61	3,4-diCIPh	CO	Single bond	Sub-18
1-1939	Sub-61	3,4-diCIPh	CO	Single bond	Sub-19
1-1940	Sub-61	3,4-diCIPh	CO	Single bond	Sub-20
1-1941	Sub-61	3,4-diCIPh	CO	Single bond	Sub-21
1-1942	Sub-61	3,4-diCIPh	CO	Single bond	Sub-22
1-1943	Sub-61	3,4-diCIPh	CO	Single bond	Sub-23
1-1944	Sub-61	3,4-diCIPh	CO	Single bond	Sub-24
1-1945	Sub-61	3,4-diCIPh	CO	Single bond	Sub-25
1-1946	Sub-61	3,4-diCIPh	CO	Single bond	Sub-26
1-1947	Sub-61	3,4-diCIPh	CO	Single bond	Sub-27
1-1948	Sub-61	3,4-diCIPh	CO	Single bond	Sub-28
1-1949	Sub-61	3,4-diCIPh	CO	Single bond	Sub-29
1-1950	Sub-61	3,4-diCIPh	CO	Single bond	Sub-30

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1951	Sub-61	3,4-diClPh	CO	Single bond	Sub-31
1-1952	Sub-61	3,4-diClPh	CO	Single bond	Sub-32
1-1953	Sub-62	3,4-diClPh	CO	Single bond	Sub-1
1-1954	Sub-62	3,4-diClPh	CO	Single bond	Sub-2
1-1955	Sub-62	3,4-diClPh	CO	Single bond	Sub-3
1-1956	Sub-62	3,4-diClPh	CO	Single bond	Sub-4
1-1957	Sub-62	3,4-diClPh	CO	Single bond	Sub-5
1-1958	Sub-62	3,4-diClPh	CO	Single bond	Sub-6
1-1959	Sub-62	3,4-diClPh	CO	Single bond	Sub-7
1-1960	Sub-62	3,4-diClPh	CO	Single bond	Sub-8
1-1961	Sub-62	3,4-diClPh	CO	Single bond	Sub-9
1-1962	Sub-62	3,4-diClPh	CO	Single bond	Sub-10
1-1963	Sub-62	3,4-diClPh	CO	Single bond	Sub-11
1-1964	Sub-62	3,4-diClPh	CO	Single bond	Sub-12
1-1965	Sub-62	3,4-diClPh	CO	Single bond	Sub-13
1-1966	Sub-62	3,4-diClPh	CO	Single bond	Sub-14
1-1967	Sub-62	3,4-diClPh	CO	Single bond	Sub-15
1-1968	Sub-62	3,4-diClPh	CO	Single bond	Sub-16
1-1969	Sub-62	3,4-diClPh	CO	Single bond	Sub-17
1-1970	Sub-62	3,4-diClPh	CO	Single bond	Sub-18
1-1971	Sub-62	3,4-diClPh	CO	Single bond	Sub-19
1-1972	Sub-62	3,4-diClPh	CO	Single bond	Sub-20
1-1973	Sub-62	3,4-diClPh	CO	Single bond	Sub-21
1-1974	Sub-62	3,4-diClPh	CO	Single bond	Sub-22
1-1975	Sub-62	3,4-diClPh	CO	Single bond	Sub-23
1-1976	Sub-62	3,4-diClPh	CO	Single bond	Sub-24

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-1977	Sub-62	3,4-diClPh	CO	Single bond	Sub-25
1-1978	Sub-62	3,4-diClPh	CO	Single bond	Sub-26
1-1979	Sub-62	3,4-diClPh	CO	Single bond	Sub-27
1-1980	Sub-62	3,4-diClPh	CO	Single bond	Sub-28
1-1981	Sub-62	3,4-diClPh	CO	Single bond	Sub-29
1-1982	Sub-62	3,4-diClPh	CO	Single bond	Sub-30
1-1983	Sub-62	3,4-diClPh	CO	Single bond	Sub-31
1-1984	Sub-62	3,4-diClPh	CO	Single bond	Sub-32
1-1985	Sub-63	3,4-diClPh	CO	Single bond	Sub-1
1-1986	Sub-63	3,4-diClPh	CO	Single bond	Sub-2
1-1987	Sub-63	3,4-diClPh	CO	Single bond	Sub-3
1-1988	Sub-63	3,4-diClPh	CO	Single bond	Sub-4
1-1989	Sub-63	3,4-diClPh	CO	Single bond	Sub-5
1-1990	Sub-63	3,4-diClPh	CO	Single bond	Sub-6
1-1991	Sub-63	3,4-diClPh	CO	Single bond	Sub-7
1-1992	Sub-63	3,4-diClPh	CO	Single bond	Sub-8
1-1993	Sub-63	3,4-diClPh	CO	Single bond	Sub-9
1-1994	Sub-63	3,4-diClPh	CO	Single bond	Sub-10
1-1995	Sub-63	3,4-diClPh	CO	Single bond	Sub-11
1-1996	Sub-63	3,4-diClPh	CO	Single bond	Sub-12
1-1997	Sub-63	3,4-diClPh	CO	Single bond	Sub-13
1-1998	Sub-63	3,4-diClPh	CO	Single bond	Sub-14
1-1999	Sub-63	3,4-diClPh	CO	Single bond	Sub-15
1-2000	Sub-63	3,4-diClPh	CO	Single bond	Sub-16
1-2001	Sub-63	3,4-diClPh	CO	Single bond	Sub-17
1-2002	Sub-63	3,4-diClPh	CO	Single bond	Sub-18

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2003	Sub-63	3,4-diClPh	CO	Single bond	Sub-19
1-2004	Sub-63	3,4-diClPh	CO	Single bond	Sub-20
1-2005	Sub-63	3,4-diClPh	CO	Single bond	Sub-21
1-2006	Sub-63	3,4-diClPh	CO	Single bond	Sub-22
1-2007	Sub-63	3,4-diClPh	CO	Single bond	Sub-23
1-2008	Sub-63	3,4-diClPh	CO	Single bond	Sub-24
1-2009	Sub-63	3,4-diClPh	CO	Single bond	Sub-25
1-2010	Sub-63	3,4-diClPh	CO	Single bond	Sub-26
1-2011	Sub-63	3,4-diClPh	CO	Single bond	Sub-27
1-2012	Sub-63	3,4-diClPh	CO	Single bond	Sub-28
1-2013	Sub-63	3,4-diClPh	CO	Single bond	Sub-29
1-2014	Sub-63	3,4-diClPh	CO	Single bond	Sub-30
1-2015	Sub-63	3,4-diClPh	CO	Single bond	Sub-31
1-2016	Sub-63	3,4-diClPh	CO	Single bond	Sub-32
1-2017	Sub-64	3,4-diClPh	CO	Single bond	Sub-1
1-2018	Sub-64	3,4-diClPh	CO	Single bond	Sub-2
1-2019	Sub-64	3,4-diClPh	CO	Single bond	Sub-3
1-2020	Sub-64	3,4-diClPh	CO	Single bond	Sub-4
1-2021	Sub-64	3,4-diClPh	CO	Single bond	Sub-5
1-2022	Sub-64	3,4-diClPh	CO	Single bond	Sub-6
1-2023	Sub-64	3,4-diClPh	CO	Single bond	Sub-7
1-2024	Sub-64	3,4-diClPh	CO	Single bond	Sub-8
1-2025	Sub-64	3,4-diClPh	CO	Single bond	Sub-9
1-2026	Sub-64	3,4-diClPh	CO	Single bond	Sub-10
1-2027	Sub-64	3,4-diClPh	CO	Single bond	Sub-11
1-2028	Sub-64	3,4-diClPh	CO	Single bond	Sub-12

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2029	Sub-64	3,4-diCIPh	CO	Single bond	Sub-13
1-2030	Sub-64	3,4-diCIPh	CO	Single bond	Sub-14
1-2031	Sub-64	3,4-diCIPh	CO	Single bond	Sub-15
1-2032	Sub-64	3,4-diCIPh	CO	Single bond	Sub-16
1-2033	Sub-64	3,4-diCIPh	CO	Single bond	Sub-17
1-2034	Sub-64	3,4-diCIPh	CO	Single bond	Sub-18
1-2035	Sub-64	3,4-diCIPh	CO	Single bond	Sub-19
1-2036	Sub-64	3,4-diCIPh	CO	Single bond	Sub-20
1-2037	Sub-64	3,4-diCIPh	CO	Single bond	Sub-21
1-2038	Sub-64	3,4-diCIPh	CO	Single bond	Sub-22
1-2039	Sub-64	3,4-diCIPh	CO	Single bond	Sub-23
1-2040	Sub-64	3,4-diCIPh	CO	Single bond	Sub-24
1-2041	Sub-64	3,4-diCIPh	CO	Single bond	Sub-25
1-2042	Sub-64	3,4-diCIPh	CO	Single bond	Sub-26
1-2043	Sub-64	3,4-diCIPh	CO	Single bond	Sub-27
1-2044	Sub-64	3,4-diCIPh	CO	Single bond	Sub-28
1-2045	Sub-64	3,4-diCIPh	CO	Single bond	Sub-29
1-2046	Sub-64	3,4-diCIPh	CO	Single bond	Sub-30
1-2047	Sub-64	3,4-diCIPh	CO	Single bond	Sub-31
1-2048	Sub-64	3,4-diCIPh	CO	Single bond	Sub-32
1-2049	Sub-33	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2050	Sub-33	3,4-diCIPh	SO ₂	Single bond	Sub-2
1-2051	Sub-33	3,4-diCIPh	SO ₂	Single bond	Sub-3
1-2052	Sub-33	3,4-diCIPh	SO ₂	Single bond	Sub-4
1-2053	Sub-33	3,4-diCIPh	SO ₂	Single bond	Sub-5
1-2054	Sub-33	3,4-diCIPh	SO ₂	Single bond	Sub-6

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2055	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2056	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2057	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2058	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2059	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2060	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2061	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2062	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2063	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2064	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2065	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2066	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2067	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2068	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2069	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2070	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2071	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2072	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2073	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2074	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2075	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2076	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2077	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2078	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2079	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2080	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-32

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2081	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2082	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-2
1-2083	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-3
1-2084	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-4
1-2085	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-5
1-2086	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-6
1-2087	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-7
1-2088	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-8
1-2089	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2090	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-2091	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-2092	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-2093	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-2094	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-14
1-2095	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-15
1-2096	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-16
1-2097	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-2098	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-2099	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-2100	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-20
1-2101	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-2102	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-22
1-2103	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-23
1-2104	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-24
1-2105	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-25
1-2106	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-26

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2107	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-27
1-2108	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-28
1-2109	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-29
1-2110	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-30
1-2111	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-31
1-2112	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-32
1-2113	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2114	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-2
1-2115	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-3
1-2116	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-4
1-2117	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-5
1-2118	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-6
1-2119	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-7
1-2120	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-8
1-2121	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2122	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-2123	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-2124	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-2125	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-2126	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-14
1-2127	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-15
1-2128	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-16
1-2129	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-2130	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-2131	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-2132	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-20

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2133	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-2134	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-22
1-2135	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-23
1-2136	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-24
1-2137	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-25
1-2138	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-26
1-2139	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-27
1-2140	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-28
1-2141	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-29
1-2142	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-30
1-2143	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-31
1-2144	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-32
1-2145	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2146	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-2
1-2147	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-3
1-2148	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-4
1-2149	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-5
1-2150	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-6
1-2151	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-7
1-2152	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-8
1-2153	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2154	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-2155	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-2156	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-2157	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-2158	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-14

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2159	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2160	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2161	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2162	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2163	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2164	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2165	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2166	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2167	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2168	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2169	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2170	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2171	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2172	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2173	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2174	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2175	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2176	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2177	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2178	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2179	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2180	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2181	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2182	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2183	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2184	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-8

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2185	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2186	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-2187	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-2188	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-2189	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-2190	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-14
1-2191	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-15
1-2192	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-16
1-2193	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-2194	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-2195	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-2196	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-20
1-2197	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-2198	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-22
1-2199	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-23
1-2200	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-24
1-2201	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-25
1-2202	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-26
1-2203	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-27
1-2204	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-28
1-2205	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-29
1-2206	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-30
1-2207	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-31
1-2208	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-32
1-2209	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2210	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-2

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2211	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2212	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2213	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2214	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2215	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2216	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2217	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2218	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2219	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2220	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2221	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2222	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2223	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2224	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2225	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2226	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2227	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2228	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2229	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2230	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2231	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2232	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2233	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2234	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2235	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2236	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-28

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2237	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2238	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2239	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2240	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2241	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2242	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2243	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2244	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2245	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2246	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2247	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2248	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2249	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2250	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2251	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2252	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2253	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2254	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2255	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2256	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2257	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2258	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2259	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2260	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2261	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2262	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-22

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2263	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2264	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2265	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2266	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2267	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2268	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2269	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2270	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2271	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2272	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2273	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2274	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2275	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2276	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2277	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2278	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2279	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2280	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2281	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2282	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2283	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2284	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2285	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2286	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2287	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2288	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-16

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2289	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-2290	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-2291	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-2292	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-20
1-2293	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-2294	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-22
1-2295	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-23
1-2296	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-24
1-2297	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-25
1-2298	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-26
1-2299	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-27
1-2300	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-28
1-2301	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-29
1-2302	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-30
1-2303	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-31
1-2304	Sub-40	3,4-diCIPh	SO ₂	Single bond	Sub-32
1-2305	Sub-41	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2306	Sub-41	3,4-diCIPh	SO ₂	Single bond	Sub-2
1-2307	Sub-41	3,4-diCIPh	SO ₂	Single bond	Sub-3
1-2308	Sub-41	3,4-diCIPh	SO ₂	Single bond	Sub-4
1-2309	Sub-41	3,4-diCIPh	SO ₂	Single bond	Sub-5
1-2310	Sub-41	3,4-diCIPh	SO ₂	Single bond	Sub-6
1-2311	Sub-41	3,4-diCIPh	SO ₂	Single bond	Sub-7
1-2312	Sub-41	3,4-diCIPh	SO ₂	Single bond	Sub-8
1-2313	Sub-41	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2314	Sub-41	3,4-diCIPh	SO ₂	Single bond	Sub-10

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2315	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2316	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2317	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2318	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2319	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2320	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2321	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2322	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2323	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2324	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2325	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2326	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2327	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2328	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2329	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2330	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2331	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2332	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2333	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2334	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2335	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2336	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2337	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2338	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2339	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2340	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-4

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2341	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-5
1-2342	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-6
1-2343	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-7
1-2344	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-8
1-2345	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2346	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-2347	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-2348	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-2349	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-2350	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-14
1-2351	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-15
1-2352	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-16
1-2353	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-2354	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-2355	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-2356	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-20
1-2357	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-2358	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-22
1-2359	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-23
1-2360	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-24
1-2361	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-25
1-2362	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-26
1-2363	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-27
1-2364	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-28
1-2365	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-29
1-2366	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-30

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2367	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2368	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2369	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2370	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2371	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2372	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2373	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2374	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2375	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2376	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2377	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2378	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2379	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2380	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2381	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2382	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2383	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2384	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2385	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2386	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2387	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2388	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2389	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2390	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2391	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2392	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-24

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2393	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2394	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2395	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2396	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2397	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2398	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2399	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2400	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2401	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2402	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2403	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2404	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2405	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2406	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2407	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2408	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2409	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2410	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2411	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2412	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2413	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2414	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2415	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2416	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2417	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2418	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-18

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2419	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2420	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2421	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2422	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2423	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2424	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2425	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2426	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2427	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2428	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2429	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2430	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2431	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2432	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2433	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2434	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2435	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2436	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2437	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2438	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2439	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2440	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2441	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2442	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2443	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2444	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-12

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2445	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2446	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2447	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2448	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2449	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2450	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2451	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2452	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2453	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2454	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2455	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2456	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2457	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2458	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2459	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2460	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2461	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2462	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2463	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2464	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2465	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2466	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2467	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2468	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2469	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2470	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-6

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2471	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-7
1-2472	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-8
1-2473	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2474	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-2475	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-2476	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-2477	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-2478	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-14
1-2479	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-15
1-2480	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-16
1-2481	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-2482	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-2483	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-2484	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-20
1-2485	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-2486	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-22
1-2487	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-23
1-2488	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-24
1-2489	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-25
1-2490	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-26
1-2491	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-27
1-2492	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-28
1-2493	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-29
1-2494	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-30
1-2495	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-31
1-2496	Sub-46	3,4-diCIPh	SO ₂	Single bond	Sub-32

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2497	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2498	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-2
1-2499	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-3
1-2500	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-4
1-2501	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-5
1-2502	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-6
1-2503	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-7
1-2504	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-8
1-2505	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2506	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-2507	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-2508	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-2509	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-2510	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-14
1-2511	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-15
1-2512	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-16
1-2513	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-2514	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-2515	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-2516	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-20
1-2517	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-2518	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-22
1-2519	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-23
1-2520	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-24
1-2521	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-25
1-2522	Sub-47	3,4-diCIPh	SO ₂	Single bond	Sub-26

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2523	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2524	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2525	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2526	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2527	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2528	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2529	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2530	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2531	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2532	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2533	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2534	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2535	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2536	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2537	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2538	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2539	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2540	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2541	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2542	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2543	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2544	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2545	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2546	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2547	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2548	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-20

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2549	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2550	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2551	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2552	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2553	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2554	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2555	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2556	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2557	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2558	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2559	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2560	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2561	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2562	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2563	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2564	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2565	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2566	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2567	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2568	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2569	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2570	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2571	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2572	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2573	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2574	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-14

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2575	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2576	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2577	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2578	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2579	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2580	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2581	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2582	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2583	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2584	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2585	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2586	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2587	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2588	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2589	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2590	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2591	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2592	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2593	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2594	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2595	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2596	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2597	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2598	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2599	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2600	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-8

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2601	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2602	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-2603	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-2604	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-2605	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-2606	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-14
1-2607	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-15
1-2608	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-16
1-2609	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-2610	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-2611	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-2612	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-20
1-2613	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-2614	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-22
1-2615	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-23
1-2616	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-24
1-2617	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-25
1-2618	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-26
1-2619	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-27
1-2620	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-28
1-2621	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-29
1-2622	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-30
1-2623	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-31
1-2624	Sub-50	3,4-diCIPh	SO ₂	Single bond	Sub-32
1-2625	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2626	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-2

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2627	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2628	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2629	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2630	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2631	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2632	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2633	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2634	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2635	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2636	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2637	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2638	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2639	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2640	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2641	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2642	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2643	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2644	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2645	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2646	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2647	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2648	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2649	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2650	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2651	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2652	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-28

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2653	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-29
1-2654	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-30
1-2655	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-31
1-2656	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-32
1-2657	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2658	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-2
1-2659	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-3
1-2660	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-4
1-2661	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-5
1-2662	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-6
1-2663	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-7
1-2664	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-8
1-2665	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2666	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-2667	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-2668	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-2669	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-2670	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-14
1-2671	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-15
1-2672	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-16
1-2673	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-2674	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-2675	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-2676	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-20
1-2677	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-2678	Sub-52	3,4-diCIPh	SO ₂	Single bond	Sub-22

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2679	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2680	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2681	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2682	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2683	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2684	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2685	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2686	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2687	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2688	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2689	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2690	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2691	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2692	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2693	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2694	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2695	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2696	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2697	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2698	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2699	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2700	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2701	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2702	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2703	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2704	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-16

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2705	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-2706	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-2707	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-2708	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-20
1-2709	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-2710	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-22
1-2711	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-23
1-2712	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-24
1-2713	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-25
1-2714	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-26
1-2715	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-27
1-2716	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-28
1-2717	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-29
1-2718	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-30
1-2719	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-31
1-2720	Sub-53	3,4-diCIPh	SO ₂	Single bond	Sub-32
1-2721	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2722	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-2
1-2723	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-3
1-2724	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-4
1-2725	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-5
1-2726	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-6
1-2727	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-7
1-2728	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-8
1-2729	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2730	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-10

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2731	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2732	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2733	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2734	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2735	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2736	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2737	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2738	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2739	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2740	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2741	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2742	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2743	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2744	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2745	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2746	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2747	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2748	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2749	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2750	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2751	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2752	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2753	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2754	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2755	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2756	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-4

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2757	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2758	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2759	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2760	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2761	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2762	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2763	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2764	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2765	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2766	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2767	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2768	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2769	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2770	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2771	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2772	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2773	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2774	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2775	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2776	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2777	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2778	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2779	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2780	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2781	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2782	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-30

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2783	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2784	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2785	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2786	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2787	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2788	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2789	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2790	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2791	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2792	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2793	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2794	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2795	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2796	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2797	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2798	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2799	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2800	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2801	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2802	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2803	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2804	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2805	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2806	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2807	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2808	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-24

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2809	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2810	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2811	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2812	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2813	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2814	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2815	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2816	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2817	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2818	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2819	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2820	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2821	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2822	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2823	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2824	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2825	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2826	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2827	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2828	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2829	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2830	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2831	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2832	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2833	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2834	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-18

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2835	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2836	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2837	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2838	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2839	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2840	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2841	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2842	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2843	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2844	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2845	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2846	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2847	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2848	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2849	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2850	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2851	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2852	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2853	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2854	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-6
1-2855	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2856	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2857	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2858	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2859	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2860	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-12

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2861	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2862	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2863	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2864	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2865	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2866	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2867	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2868	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2869	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2870	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2871	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2872	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2873	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2874	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2875	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2876	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2877	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2878	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2879	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2880	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-32
1-2881	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-1
1-2882	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-2
1-2883	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-3
1-2884	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-4
1-2885	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-5
1-2886	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-6

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2887	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-7
1-2888	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-8
1-2889	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-9
1-2890	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-10
1-2891	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-11
1-2892	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-12
1-2893	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-13
1-2894	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-14
1-2895	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2896	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2897	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2898	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2899	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2900	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2901	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2902	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2903	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-23
1-2904	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-24
1-2905	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-25
1-2906	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-26
1-2907	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-27
1-2908	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-28
1-2909	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-29
1-2910	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-30
1-2911	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-31
1-2912	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-32

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2913	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2914	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-2
1-2915	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-3
1-2916	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-4
1-2917	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-5
1-2918	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-6
1-2919	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-7
1-2920	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-8
1-2921	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2922	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-2923	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-2924	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-2925	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-2926	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-14
1-2927	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-15
1-2928	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-16
1-2929	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-2930	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-2931	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-2932	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-20
1-2933	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-2934	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-22
1-2935	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-23
1-2936	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-24
1-2937	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-25
1-2938	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-26

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2939	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-27
1-2940	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-28
1-2941	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-29
1-2942	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-30
1-2943	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-31
1-2944	Sub-60	3,4-diCIPh	SO ₂	Single bond	Sub-32
1-2945	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2946	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-2
1-2947	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-3
1-2948	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-4
1-2949	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-5
1-2950	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-6
1-2951	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-7
1-2952	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-8
1-2953	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2954	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-2955	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-2956	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-2957	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-2958	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-14
1-2959	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-15
1-2960	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-16
1-2961	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-2962	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-2963	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-2964	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-20

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2965	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-2966	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-22
1-2967	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-23
1-2968	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-24
1-2969	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-25
1-2970	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-26
1-2971	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-27
1-2972	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-28
1-2973	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-29
1-2974	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-30
1-2975	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-31
1-2976	Sub-61	3,4-diCIPh	SO ₂	Single bond	Sub-32
1-2977	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-2978	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-2
1-2979	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-3
1-2980	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-4
1-2981	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-5
1-2982	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-6
1-2983	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-7
1-2984	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-8
1-2985	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-2986	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-2987	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-2988	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-2989	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-2990	Sub-62	3,4-diCIPh	SO ₂	Single bond	Sub-14

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-2991	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-15
1-2992	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-16
1-2993	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-17
1-2994	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-18
1-2995	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-19
1-2996	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-20
1-2997	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-21
1-2998	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-22
1-2999	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-23
1-3000	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-24
1-3001	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-25
1-3002	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-26
1-3003	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-27
1-3004	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-28
1-3005	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-29
1-3006	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-30
1-3007	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-31
1-3008	Sub-62	3,4-diClPh	SO ₂	Single bond	Sub-32
1-3009	Sub-63	3,4-diClPh	SO ₂	Single bond	Sub-1
1-3010	Sub-63	3,4-diClPh	SO ₂	Single bond	Sub-2
1-3011	Sub-63	3,4-diClPh	SO ₂	Single bond	Sub-3
1-3012	Sub-63	3,4-diClPh	SO ₂	Single bond	Sub-4
1-3013	Sub-63	3,4-diClPh	SO ₂	Single bond	Sub-5
1-3014	Sub-63	3,4-diClPh	SO ₂	Single bond	Sub-6
1-3015	Sub-63	3,4-diClPh	SO ₂	Single bond	Sub-7
1-3016	Sub-63	3,4-diClPh	SO ₂	Single bond	Sub-8

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3017	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-9
1-3018	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-10
1-3019	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-11
1-3020	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-12
1-3021	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-13
1-3022	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-14
1-3023	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-15
1-3024	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-16
1-3025	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-17
1-3026	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-18
1-3027	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-19
1-3028	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-20
1-3029	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-21
1-3030	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-22
1-3031	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-23
1-3032	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-24
1-3033	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-25
1-3034	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-26
1-3035	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-27
1-3036	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-28
1-3037	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-29
1-3038	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-30
1-3039	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-31
1-3040	Sub-63	3,4-diCIPh	SO ₂	Single bond	Sub-32
1-3041	Sub-64	3,4-diCIPh	SO ₂	Single bond	Sub-1
1-3042	Sub-64	3,4-diCIPh	SO ₂	Single bond	Sub-2

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3043	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-3
1-3044	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-4
1-3045	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-5
1-3046	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-6
1-3047	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-7
1-3048	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-8
1-3049	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-9
1-3050	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-10
1-3051	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-11
1-3052	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-12
1-3053	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-13
1-3054	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-14
1-3055	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-15
1-3056	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-16
1-3057	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-17
1-3058	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-18
1-3059	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-19
1-3060	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-20
1-3061	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-21
1-3062	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-22
1-3063	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-23
1-3064	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-24
1-3065	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-25
1-3066	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-26
1-3067	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-27
1-3068	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-28

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3069	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-29
1-3070	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-30
1-3071	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-31
1-3072	Sub-64	3,4-diClPh	SO ₂	Single bond	Sub-32
1-3073	Sub-33	3,4-diClPh	CO	CH ₂	Sub-1
1-3074	Sub-33	3,4-diClPh	CO	CH ₂	Sub-2
1-3075	Sub-33	3,4-diClPh	CO	CH ₂	Sub-3
1-3076	Sub-33	3,4-diClPh	CO	CH ₂	Sub-4
1-3077	Sub-33	3,4-diClPh	CO	CH ₂	Sub-5
1-3078	Sub-33	3,4-diClPh	CO	CH ₂	Sub-6
1-3079	Sub-33	3,4-diClPh	CO	CH ₂	Sub-7
1-3080	Sub-33	3,4-diClPh	CO	CH ₂	Sub-8
1-3081	Sub-33	3,4-diClPh	CO	CH ₂	Sub-9
1-3082	Sub-33	3,4-diClPh	CO	CH ₂	Sub-10
1-3083	Sub-33	3,4-diClPh	CO	CH ₂	Sub-11
1-3084	Sub-33	3,4-diClPh	CO	CH ₂	Sub-12
1-3085	Sub-33	3,4-diClPh	CO	CH ₂	Sub-13
1-3086	Sub-33	3,4-diClPh	CO	CH ₂	Sub-14
1-3087	Sub-33	3,4-diClPh	CO	CH ₂	Sub-15
1-3088	Sub-33	3,4-diClPh	CO	CH ₂	Sub-16
1-3089	Sub-33	3,4-diClPh	CO	CH ₂	Sub-17
1-3090	Sub-33	3,4-diClPh	CO	CH ₂	Sub-18
1-3091	Sub-33	3,4-diClPh	CO	CH ₂	Sub-19
1-3092	Sub-33	3,4-diClPh	CO	CH ₂	Sub-20
1-3093	Sub-33	3,4-diClPh	CO	CH ₂	Sub-21
1-3094	Sub-33	3,4-diClPh	CO	CH ₂	Sub-22

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3095	Sub-33	3,4-diCIPh	CO	CH ₂	Sub-23
1-3096	Sub-33	3,4-diCIPh	CO	CH ₂	Sub-24
1-3097	Sub-33	3,4-diCIPh	CO	CH ₂	Sub-25
1-3098	Sub-33	3,4-diCIPh	CO	CH ₂	Sub-26
1-3099	Sub-33	3,4-diCIPh	CO	CH ₂	Sub-27
1-3100	Sub-33	3,4-diCIPh	CO	CH ₂	Sub-28
1-3101	Sub-33	3,4-diCIPh	CO	CH ₂	Sub-29
1-3102	Sub-33	3,4-diCIPh	CO	CH ₂	Sub-30
1-3103	Sub-33	3,4-diCIPh	CO	CH ₂	Sub-31
1-3104	Sub-33	3,4-diCIPh	CO	CH ₂	Sub-32
1-3105	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-1
1-3106	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-2
1-3107	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-3
1-3108	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-4
1-3109	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-5
1-3110	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-6
1-3111	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-7
1-3112	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-8
1-3113	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-9
1-3114	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-10
1-3115	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-11
1-3116	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-12
1-3117	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-13
1-3118	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-14
1-3119	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-15
1-3120	Sub-34	3,4-diCIPh	CO	CH ₂	Sub-16

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3121	Sub-34	3,4-diClPh	CO	CH ₂	Sub-17
1-3122	Sub-34	3,4-diClPh	CO	CH ₂	Sub-18
1-3123	Sub-34	3,4-diClPh	CO	CH ₂	Sub-19
1-3124	Sub-34	3,4-diClPh	CO	CH ₂	Sub-20
1-3125	Sub-34	3,4-diClPh	CO	CH ₂	Sub-21
1-3126	Sub-34	3,4-diClPh	CO	CH ₂	Sub-22
1-3127	Sub-34	3,4-diClPh	CO	CH ₂	Sub-23
1-3128	Sub-34	3,4-diClPh	CO	CH ₂	Sub-24
1-3129	Sub-34	3,4-diClPh	CO	CH ₂	Sub-25
1-3130	Sub-34	3,4-diClPh	CO	CH ₂	Sub-26
1-3131	Sub-34	3,4-diClPh	CO	CH ₂	Sub-27
1-3132	Sub-34	3,4-diClPh	CO	CH ₂	Sub-28
1-3133	Sub-34	3,4-diClPh	CO	CH ₂	Sub-29
1-3134	Sub-34	3,4-diClPh	CO	CH ₂	Sub-30
1-3135	Sub-34	3,4-diClPh	CO	CH ₂	Sub-31
1-3136	Sub-34	3,4-diClPh	CO	CH ₂	Sub-32
1-3137	Sub-35	3,4-diClPh	CO	CH ₂	Sub-1
1-3138	Sub-35	3,4-diClPh	CO	CH ₂	Sub-2
1-3139	Sub-35	3,4-diClPh	CO	CH ₂	Sub-3
1-3140	Sub-35	3,4-diClPh	CO	CH ₂	Sub-4
1-3141	Sub-35	3,4-diClPh	CO	CH ₂	Sub-5
1-3142	Sub-35	3,4-diClPh	CO	CH ₂	Sub-6
1-3143	Sub-35	3,4-diClPh	CO	CH ₂	Sub-7
1-3144	Sub-35	3,4-diClPh	CO	CH ₂	Sub-8
1-3145	Sub-35	3,4-diClPh	CO	CH ₂	Sub-9
1-3146	Sub-35	3,4-diClPh	CO	CH ₂	Sub-10

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3147	Sub-35	3,4-diClPh	CO	CH ₂	Sub-11
1-3148	Sub-35	3,4-diClPh	CO	CH ₂	Sub-12
1-3149	Sub-35	3,4-diClPh	CO	CH ₂	Sub-13
1-3150	Sub-35	3,4-diClPh	CO	CH ₂	Sub-14
1-3151	Sub-35	3,4-diClPh	CO	CH ₂	Sub-15
1-3152	Sub-35	3,4-diClPh	CO	CH ₂	Sub-16
1-3153	Sub-35	3,4-diClPh	CO	CH ₂	Sub-17
1-3154	Sub-35	3,4-diClPh	CO	CH ₂	Sub-18
1-3155	Sub-35	3,4-diClPh	CO	CH ₂	Sub-19
1-3156	Sub-35	3,4-diClPh	CO	CH ₂	Sub-20
1-3157	Sub-35	3,4-diClPh	CO	CH ₂	Sub-21
1-3158	Sub-35	3,4-diClPh	CO	CH ₂	Sub-22
1-3159	Sub-35	3,4-diClPh	CO	CH ₂	Sub-23
1-3160	Sub-35	3,4-diClPh	CO	CH ₂	Sub-24
1-3161	Sub-35	3,4-diClPh	CO	CH ₂	Sub-25
1-3162	Sub-35	3,4-diClPh	CO	CH ₂	Sub-26
1-3163	Sub-35	3,4-diClPh	CO	CH ₂	Sub-27
1-3164	Sub-35	3,4-diClPh	CO	CH ₂	Sub-28
1-3165	Sub-35	3,4-diClPh	CO	CH ₂	Sub-29
1-3166	Sub-35	3,4-diClPh	CO	CH ₂	Sub-30
1-3167	Sub-35	3,4-diClPh	CO	CH ₂	Sub-31
1-3168	Sub-35	3,4-diClPh	CO	CH ₂	Sub-32
1-3169	Sub-36	3,4-diClPh	CO	CH ₂	Sub-1
1-3170	Sub-36	3,4-diClPh	CO	CH ₂	Sub-2
1-3171	Sub-36	3,4-diClPh	CO	CH ₂	Sub-3
1-3172	Sub-36	3,4-diClPh	CO	CH ₂	Sub-4

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3173	Sub-36	3,4-diClPh	CO	CH ₂	Sub-5
1-3174	Sub-36	3,4-diClPh	CO	CH ₂	Sub-6
1-3175	Sub-36	3,4-diClPh	CO	CH ₂	Sub-7
1-3176	Sub-36	3,4-diClPh	CO	CH ₂	Sub-8
1-3177	Sub-36	3,4-diClPh	CO	CH ₂	Sub-9
1-3178	Sub-36	3,4-diClPh	CO	CH ₂	Sub-10
1-3179	Sub-36	3,4-diClPh	CO	CH ₂	Sub-11
1-3180	Sub-36	3,4-diClPh	CO	CH ₂	Sub-12
1-3181	Sub-36	3,4-diClPh	CO	CH ₂	Sub-13
1-3182	Sub-36	3,4-diClPh	CO	CH ₂	Sub-14
1-3183	Sub-36	3,4-diClPh	CO	CH ₂	Sub-15
1-3184	Sub-36	3,4-diClPh	CO	CH ₂	Sub-16
1-3185	Sub-36	3,4-diClPh	CO	CH ₂	Sub-17
1-3186	Sub-36	3,4-diClPh	CO	CH ₂	Sub-18
1-3187	Sub-36	3,4-diClPh	CO	CH ₂	Sub-19
1-3188	Sub-36	3,4-diClPh	CO	CH ₂	Sub-20
1-3189	Sub-36	3,4-diClPh	CO	CH ₂	Sub-21
1-3190	Sub-36	3,4-diClPh	CO	CH ₂	Sub-22
1-3191	Sub-36	3,4-diClPh	CO	CH ₂	Sub-23
1-3192	Sub-36	3,4-diClPh	CO	CH ₂	Sub-24
1-3193	Sub-36	3,4-diClPh	CO	CH ₂	Sub-25
1-3194	Sub-36	3,4-diClPh	CO	CH ₂	Sub-26
1-3195	Sub-36	3,4-diClPh	CO	CH ₂	Sub-27
1-3196	Sub-36	3,4-diClPh	CO	CH ₂	Sub-28
1-3197	Sub-36	3,4-diClPh	CO	CH ₂	Sub-29
1-3198	Sub-36	3,4-diClPh	CO	CH ₂	Sub-30

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3199	Sub-36	3,4-diClPh	CO	CH ₂	Sub-31
1-3200	Sub-36	3,4-diClPh	CO	CH ₂	Sub-32
1-3201	Sub-37	3,4-diClPh	CO	CH ₂	Sub-1
1-3202	Sub-37	3,4-diClPh	CO	CH ₂	Sub-2
1-3203	Sub-37	3,4-diClPh	CO	CH ₂	Sub-3
1-3204	Sub-37	3,4-diClPh	CO	CH ₂	Sub-4
1-3205	Sub-37	3,4-diClPh	CO	CH ₂	Sub-5
1-3206	Sub-37	3,4-diClPh	CO	CH ₂	Sub-6
1-3207	Sub-37	3,4-diClPh	CO	CH ₂	Sub-7
1-3208	Sub-37	3,4-diClPh	CO	CH ₂	Sub-8
1-3209	Sub-37	3,4-diClPh	CO	CH ₂	Sub-9
1-3210	Sub-37	3,4-diClPh	CO	CH ₂	Sub-10
1-3211	Sub-37	3,4-diClPh	CO	CH ₂	Sub-11
1-3212	Sub-37	3,4-diClPh	CO	CH ₂	Sub-12
1-3213	Sub-37	3,4-diClPh	CO	CH ₂	Sub-13
1-3214	Sub-37	3,4-diClPh	CO	CH ₂	Sub-14
1-3215	Sub-37	3,4-diClPh	CO	CH ₂	Sub-15
1-3216	Sub-37	3,4-diClPh	CO	CH ₂	Sub-16
1-3217	Sub-37	3,4-diClPh	CO	CH ₂	Sub-17
1-3218	Sub-37	3,4-diClPh	CO	CH ₂	Sub-18
1-3219	Sub-37	3,4-diClPh	CO	CH ₂	Sub-19
1-3220	Sub-37	3,4-diClPh	CO	CH ₂	Sub-20
1-3221	Sub-37	3,4-diClPh	CO	CH ₂	Sub-21
1-3222	Sub-37	3,4-diClPh	CO	CH ₂	Sub-22
1-3223	Sub-37	3,4-diClPh	CO	CH ₂	Sub-23
1-3224	Sub-37	3,4-diClPh	CO	CH ₂	Sub-24

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3225	Sub-37	3,4-diClPh	CO	CH ₂	Sub-25
1-3226	Sub-37	3,4-diClPh	CO	CH ₂	Sub-26
1-3227	Sub-37	3,4-diClPh	CO	CH ₂	Sub-27
1-3228	Sub-37	3,4-diClPh	CO	CH ₂	Sub-28
1-3229	Sub-37	3,4-diClPh	CO	CH ₂	Sub-29
1-3230	Sub-37	3,4-diClPh	CO	CH ₂	Sub-30
1-3231	Sub-37	3,4-diClPh	CO	CH ₂	Sub-31
1-3232	Sub-37	3,4-diClPh	CO	CH ₂	Sub-32
1-3233	Sub-38	3,4-diClPh	CO	CH ₂	Sub-1
1-3234	Sub-38	3,4-diClPh	CO	CH ₂	Sub-2
1-3235	Sub-38	3,4-diClPh	CO	CH ₂	Sub-3
1-3236	Sub-38	3,4-diClPh	CO	CH ₂	Sub-4
1-3237	Sub-38	3,4-diClPh	CO	CH ₂	Sub-5
1-3238	Sub-38	3,4-diClPh	CO	CH ₂	Sub-6
1-3239	Sub-38	3,4-diClPh	CO	CH ₂	Sub-7
1-3240	Sub-38	3,4-diClPh	CO	CH ₂	Sub-8
1-3241	Sub-38	3,4-diClPh	CO	CH ₂	Sub-9
1-3242	Sub-38	3,4-diClPh	CO	CH ₂	Sub-10
1-3243	Sub-38	3,4-diClPh	CO	CH ₂	Sub-11
1-3244	Sub-38	3,4-diClPh	CO	CH ₂	Sub-12
1-3245	Sub-38	3,4-diClPh	CO	CH ₂	Sub-13
1-3246	Sub-38	3,4-diClPh	CO	CH ₂	Sub-14
1-3247	Sub-38	3,4-diClPh	CO	CH ₂	Sub-15
1-3248	Sub-38	3,4-diClPh	CO	CH ₂	Sub-16
1-3249	Sub-38	3,4-diClPh	CO	CH ₂	Sub-17
1-3250	Sub-38	3,4-diClPh	CO	CH ₂	Sub-18

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3251	Sub-38	3,4-diClPh	CO	CH ₂	Sub-19
1-3252	Sub-38	3,4-diClPh	CO	CH ₂	Sub-20
1-3253	Sub-38	3,4-diClPh	CO	CH ₂	Sub-21
1-3254	Sub-38	3,4-diClPh	CO	CH ₂	Sub-22
1-3255	Sub-38	3,4-diClPh	CO	CH ₂	Sub-23
1-3256	Sub-38	3,4-diClPh	CO	CH ₂	Sub-24
1-3257	Sub-38	3,4-diClPh	CO	CH ₂	Sub-25
1-3258	Sub-38	3,4-diClPh	CO	CH ₂	Sub-26
1-3259	Sub-38	3,4-diClPh	CO	CH ₂	Sub-27
1-3260	Sub-38	3,4-diClPh	CO	CH ₂	Sub-28
1-3261	Sub-38	3,4-diClPh	CO	CH ₂	Sub-29
1-3262	Sub-38	3,4-diClPh	CO	CH ₂	Sub-30
1-3263	Sub-38	3,4-diClPh	CO	CH ₂	Sub-31
1-3264	Sub-38	3,4-diClPh	CO	CH ₂	Sub-32
1-3265	Sub-39	3,4-diClPh	CO	CH ₂	Sub-1
1-3266	Sub-39	3,4-diClPh	CO	CH ₂	Sub-2
1-3267	Sub-39	3,4-diClPh	CO	CH ₂	Sub-3
1-3268	Sub-39	3,4-diClPh	CO	CH ₂	Sub-4
1-3269	Sub-39	3,4-diClPh	CO	CH ₂	Sub-5
1-3270	Sub-39	3,4-diClPh	CO	CH ₂	Sub-6
1-3271	Sub-39	3,4-diClPh	CO	CH ₂	Sub-7
1-3272	Sub-39	3,4-diClPh	CO	CH ₂	Sub-8
1-3273	Sub-39	3,4-diClPh	CO	CH ₂	Sub-9
1-3274	Sub-39	3,4-diClPh	CO	CH ₂	Sub-10
1-3275	Sub-39	3,4-diClPh	CO	CH ₂	Sub-11
1-3276	Sub-39	3,4-diClPh	CO	CH ₂	Sub-12

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3277	Sub-39	3,4-diClPh	CO	CH ₂	Sub-13
1-3278	Sub-39	3,4-diClPh	CO	CH ₂	Sub-14
1-3279	Sub-39	3,4-diClPh	CO	CH ₂	Sub-15
1-3280	Sub-39	3,4-diClPh	CO	CH ₂	Sub-16
1-3281	Sub-39	3,4-diClPh	CO	CH ₂	Sub-17
1-3282	Sub-39	3,4-diClPh	CO	CH ₂	Sub-18
1-3283	Sub-39	3,4-diClPh	CO	CH ₂	Sub-19
1-3284	Sub-39	3,4-diClPh	CO	CH ₂	Sub-20
1-3285	Sub-39	3,4-diClPh	CO	CH ₂	Sub-21
1-3286	Sub-39	3,4-diClPh	CO	CH ₂	Sub-22
1-3287	Sub-39	3,4-diClPh	CO	CH ₂	Sub-23
1-3288	Sub-39	3,4-diClPh	CO	CH ₂	Sub-24
1-3289	Sub-39	3,4-diClPh	CO	CH ₂	Sub-25
1-3290	Sub-39	3,4-diClPh	CO	CH ₂	Sub-26
1-3291	Sub-39	3,4-diClPh	CO	CH ₂	Sub-27
1-3292	Sub-39	3,4-diClPh	CO	CH ₂	Sub-28
1-3293	Sub-39	3,4-diClPh	CO	CH ₂	Sub-29
1-3294	Sub-39	3,4-diClPh	CO	CH ₂	Sub-30
1-3295	Sub-39	3,4-diClPh	CO	CH ₂	Sub-31
1-3296	Sub-39	3,4-diClPh	CO	CH ₂	Sub-32
1-3297	Sub-40	3,4-diClPh	CO	CH ₂	Sub-1
1-3298	Sub-40	3,4-diClPh	CO	CH ₂	Sub-2
1-3299	Sub-40	3,4-diClPh	CO	CH ₂	Sub-3
1-3300	Sub-40	3,4-diClPh	CO	CH ₂	Sub-4
1-3301	Sub-40	3,4-diClPh	CO	CH ₂	Sub-5
1-3302	Sub-40	3,4-diClPh	CO	CH ₂	Sub-6

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3303	Sub-40	3,4-diClPh	CO	CH ₂	Sub-7
1-3304	Sub-40	3,4-diClPh	CO	CH ₂	Sub-8
1-3305	Sub-40	3,4-diClPh	CO	CH ₂	Sub-9
1-3306	Sub-40	3,4-diClPh	CO	CH ₂	Sub-10
1-3307	Sub-40	3,4-diClPh	CO	CH ₂	Sub-11
1-3308	Sub-40	3,4-diClPh	CO	CH ₂	Sub-12
1-3309	Sub-40	3,4-diClPh	CO	CH ₂	Sub-13
1-3310	Sub-40	3,4-diClPh	CO	CH ₂	Sub-14
1-3311	Sub-40	3,4-diClPh	CO	CH ₂	Sub-15
1-3312	Sub-40	3,4-diClPh	CO	CH ₂	Sub-16
1-3313	Sub-40	3,4-diClPh	CO	CH ₂	Sub-17
1-3314	Sub-40	3,4-diClPh	CO	CH ₂	Sub-18
1-3315	Sub-40	3,4-diClPh	CO	CH ₂	Sub-19
1-3316	Sub-40	3,4-diClPh	CO	CH ₂	Sub-20
1-3317	Sub-40	3,4-diClPh	CO	CH ₂	Sub-21
1-3318	Sub-40	3,4-diClPh	CO	CH ₂	Sub-22
1-3319	Sub-40	3,4-diClPh	CO	CH ₂	Sub-23
1-3320	Sub-40	3,4-diClPh	CO	CH ₂	Sub-24
1-3321	Sub-40	3,4-diClPh	CO	CH ₂	Sub-25
1-3322	Sub-40	3,4-diClPh	CO	CH ₂	Sub-26
1-3323	Sub-40	3,4-diClPh	CO	CH ₂	Sub-27
1-3324	Sub-40	3,4-diClPh	CO	CH ₂	Sub-28
1-3325	Sub-40	3,4-diClPh	CO	CH ₂	Sub-29
1-3326	Sub-40	3,4-diClPh	CO	CH ₂	Sub-30
1-3327	Sub-40	3,4-diClPh	CO	CH ₂	Sub-31
1-3328	Sub-40	3,4-diClPh	CO	CH ₂	Sub-32

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3329	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-1
1-3330	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-2
1-3331	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-3
1-3332	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-4
1-3333	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-5
1-3334	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-6
1-3335	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-7
1-3336	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-8
1-3337	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-9
1-3338	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-10
1-3339	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-11
1-3340	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-12
1-3341	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-13
1-3342	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-14
1-3343	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-15
1-3344	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-16
1-3345	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-17
1-3346	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-18
1-3347	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-19
1-3348	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-20
1-3349	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-21
1-3350	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-22
1-3351	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-23
1-3352	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-24
1-3353	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-25
1-3354	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-26

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3355	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-27
1-3356	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-28
1-3357	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-29
1-3358	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-30
1-3359	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-31
1-3360	Sub-41	3,4-diCIPh	CO	CH ₂	Sub-32
1-3361	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-1
1-3362	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-2
1-3363	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-3
1-3364	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-4
1-3365	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-5
1-3366	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-6
1-3367	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-7
1-3368	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-8
1-3369	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-9
1-3370	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-10
1-3371	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-11
1-3372	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-12
1-3373	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-13
1-3374	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-14
1-3375	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-15
1-3376	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-16
1-3377	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-17
1-3378	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-18
1-3379	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-19
1-3380	Sub-42	3,4-diCIPh	CO	CH ₂	Sub-20

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3381	Sub-42	3,4-diClPh	CO	CH ₂	Sub-21
1-3382	Sub-42	3,4-diClPh	CO	CH ₂	Sub-22
1-3383	Sub-42	3,4-diClPh	CO	CH ₂	Sub-23
1-3384	Sub-42	3,4-diClPh	CO	CH ₂	Sub-24
1-3385	Sub-42	3,4-diClPh	CO	CH ₂	Sub-25
1-3386	Sub-42	3,4-diClPh	CO	CH ₂	Sub-26
1-3387	Sub-42	3,4-diClPh	CO	CH ₂	Sub-27
1-3388	Sub-42	3,4-diClPh	CO	CH ₂	Sub-28
1-3389	Sub-42	3,4-diClPh	CO	CH ₂	Sub-29
1-3390	Sub-42	3,4-diClPh	CO	CH ₂	Sub-30
1-3391	Sub-42	3,4-diClPh	CO	CH ₂	Sub-31
1-3392	Sub-42	3,4-diClPh	CO	CH ₂	Sub-32
1-3393	Sub-43	3,4-diClPh	CO	CH ₂	Sub-1
1-3394	Sub-43	3,4-diClPh	CO	CH ₂	Sub-2
1-3395	Sub-43	3,4-diClPh	CO	CH ₂	Sub-3
1-3396	Sub-43	3,4-diClPh	CO	CH ₂	Sub-4
1-3397	Sub-43	3,4-diClPh	CO	CH ₂	Sub-5
1-3398	Sub-43	3,4-diClPh	CO	CH ₂	Sub-6
1-3399	Sub-43	3,4-diClPh	CO	CH ₂	Sub-7
1-3400	Sub-43	3,4-diClPh	CO	CH ₂	Sub-8
1-3401	Sub-43	3,4-diClPh	CO	CH ₂	Sub-9
1-3402	Sub-43	3,4-diClPh	CO	CH ₂	Sub-10
1-3403	Sub-43	3,4-diClPh	CO	CH ₂	Sub-11
1-3404	Sub-43	3,4-diClPh	CO	CH ₂	Sub-12
1-3405	Sub-43	3,4-diClPh	CO	CH ₂	Sub-13
1-3406	Sub-43	3,4-diClPh	CO	CH ₂	Sub-14

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3407	Sub-43	3,4-diClPh	CO	CH ₂	Sub-15
1-3408	Sub-43	3,4-diClPh	CO	CH ₂	Sub-16
1-3409	Sub-43	3,4-diClPh	CO	CH ₂	Sub-17
1-3410	Sub-43	3,4-diClPh	CO	CH ₂	Sub-18
1-3411	Sub-43	3,4-diClPh	CO	CH ₂	Sub-19
1-3412	Sub-43	3,4-diClPh	CO	CH ₂	Sub-20
1-3413	Sub-43	3,4-diClPh	CO	CH ₂	Sub-21
1-3414	Sub-43	3,4-diClPh	CO	CH ₂	Sub-22
1-3415	Sub-43	3,4-diClPh	CO	CH ₂	Sub-23
1-3416	Sub-43	3,4-diClPh	CO	CH ₂	Sub-24
1-3417	Sub-43	3,4-diClPh	CO	CH ₂	Sub-25
1-3418	Sub-43	3,4-diClPh	CO	CH ₂	Sub-26
1-3419	Sub-43	3,4-diClPh	CO	CH ₂	Sub-27
1-3420	Sub-43	3,4-diClPh	CO	CH ₂	Sub-28
1-3421	Sub-43	3,4-diClPh	CO	CH ₂	Sub-29
1-3422	Sub-43	3,4-diClPh	CO	CH ₂	Sub-30
1-3423	Sub-43	3,4-diClPh	CO	CH ₂	Sub-31
1-3424	Sub-43	3,4-diClPh	CO	CH ₂	Sub-32
1-3425	Sub-44	3,4-diClPh	CO	CH ₂	Sub-1
1-3426	Sub-44	3,4-diClPh	CO	CH ₂	Sub-2
1-3427	Sub-44	3,4-diClPh	CO	CH ₂	Sub-3
1-3428	Sub-44	3,4-diClPh	CO	CH ₂	Sub-4
1-3429	Sub-44	3,4-diClPh	CO	CH ₂	Sub-5
1-3430	Sub-44	3,4-diClPh	CO	CH ₂	Sub-6
1-3431	Sub-44	3,4-diClPh	CO	CH ₂	Sub-7
1-3432	Sub-44	3,4-diClPh	CO	CH ₂	Sub-8

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3433	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-9
1-3434	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-10
1-3435	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-11
1-3436	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-12
1-3437	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-13
1-3438	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-14
1-3439	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-15
1-3440	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-16
1-3441	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-17
1-3442	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-18
1-3443	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-19
1-3444	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-20
1-3445	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-21
1-3446	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-22
1-3447	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-23
1-3448	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-24
1-3449	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-25
1-3450	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-26
1-3451	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-27
1-3452	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-28
1-3453	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-29
1-3454	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-30
1-3455	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-31
1-3456	Sub-44	3,4-diCIPh	CO	CH ₂	Sub-32
1-3457	Sub-45	3,4-diCIPh	CO	CH ₂	Sub-1
1-3458	Sub-45	3,4-diCIPh	CO	CH ₂	Sub-2

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3459	Sub-45	3,4-diClPh	CO	CH ₂	Sub-3
1-3460	Sub-45	3,4-diClPh	CO	CH ₂	Sub-4
1-3461	Sub-45	3,4-diClPh	CO	CH ₂	Sub-5
1-3462	Sub-45	3,4-diClPh	CO	CH ₂	Sub-6
1-3463	Sub-45	3,4-diClPh	CO	CH ₂	Sub-7
1-3464	Sub-45	3,4-diClPh	CO	CH ₂	Sub-8
1-3465	Sub-45	3,4-diClPh	CO	CH ₂	Sub-9
1-3466	Sub-45	3,4-diClPh	CO	CH ₂	Sub-10
1-3467	Sub-45	3,4-diClPh	CO	CH ₂	Sub-11
1-3468	Sub-45	3,4-diClPh	CO	CH ₂	Sub-12
1-3469	Sub-45	3,4-diClPh	CO	CH ₂	Sub-13
1-3470	Sub-45	3,4-diClPh	CO	CH ₂	Sub-14
1-3471	Sub-45	3,4-diClPh	CO	CH ₂	Sub-15
1-3472	Sub-45	3,4-diClPh	CO	CH ₂	Sub-16
1-3473	Sub-45	3,4-diClPh	CO	CH ₂	Sub-17
1-3474	Sub-45	3,4-diClPh	CO	CH ₂	Sub-18
1-3475	Sub-45	3,4-diClPh	CO	CH ₂	Sub-19
1-3476	Sub-45	3,4-diClPh	CO	CH ₂	Sub-20
1-3477	Sub-45	3,4-diClPh	CO	CH ₂	Sub-21
1-3478	Sub-45	3,4-diClPh	CO	CH ₂	Sub-22
1-3479	Sub-45	3,4-diClPh	CO	CH ₂	Sub-23
1-3480	Sub-45	3,4-diClPh	CO	CH ₂	Sub-24
1-3481	Sub-45	3,4-diClPh	CO	CH ₂	Sub-25
1-3482	Sub-45	3,4-diClPh	CO	CH ₂	Sub-26
1-3483	Sub-45	3,4-diClPh	CO	CH ₂	Sub-27
1-3484	Sub-45	3,4-diClPh	CO	CH ₂	Sub-28

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3485	Sub-45	3,4-diClPh	CO	CH ₂	Sub-29
1-3486	Sub-45	3,4-diClPh	CO	CH ₂	Sub-30
1-3487	Sub-45	3,4-diClPh	CO	CH ₂	Sub-31
1-3488	Sub-45	3,4-diClPh	CO	CH ₂	Sub-32
1-3489	Sub-46	3,4-diClPh	CO	CH ₂	Sub-1
1-3490	Sub-46	3,4-diClPh	CO	CH ₂	Sub-2
1-3491	Sub-46	3,4-diClPh	CO	CH ₂	Sub-3
1-3492	Sub-46	3,4-diClPh	CO	CH ₂	Sub-4
1-3493	Sub-46	3,4-diClPh	CO	CH ₂	Sub-5
1-3494	Sub-46	3,4-diClPh	CO	CH ₂	Sub-6
1-3495	Sub-46	3,4-diClPh	CO	CH ₂	Sub-7
1-3496	Sub-46	3,4-diClPh	CO	CH ₂	Sub-8
1-3497	Sub-46	3,4-diClPh	CO	CH ₂	Sub-9
1-3498	Sub-46	3,4-diClPh	CO	CH ₂	Sub-10
1-3499	Sub-46	3,4-diClPh	CO	CH ₂	Sub-11
1-3500	Sub-46	3,4-diClPh	CO	CH ₂	Sub-12
1-3501	Sub-46	3,4-diClPh	CO	CH ₂	Sub-13
1-3502	Sub-46	3,4-diClPh	CO	CH ₂	Sub-14
1-3503	Sub-46	3,4-diClPh	CO	CH ₂	Sub-15
1-3504	Sub-46	3,4-diClPh	CO	CH ₂	Sub-16
1-3505	Sub-46	3,4-diClPh	CO	CH ₂	Sub-17
1-3506	Sub-46	3,4-diClPh	CO	CH ₂	Sub-18
1-3507	Sub-46	3,4-diClPh	CO	CH ₂	Sub-19
1-3508	Sub-46	3,4-diClPh	CO	CH ₂	Sub-20
1-3509	Sub-46	3,4-diClPh	CO	CH ₂	Sub-21
1-3510	Sub-46	3,4-diClPh	CO	CH ₂	Sub-22

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3511	Sub-46	3,4-diCIPh	CO	CH ₂	Sub-23
1-3512	Sub-46	3,4-diCIPh	CO	CH ₂	Sub-24
1-3513	Sub-46	3,4-diCIPh	CO	CH ₂	Sub-25
1-3514	Sub-46	3,4-diCIPh	CO	CH ₂	Sub-26
1-3515	Sub-46	3,4-diCIPh	CO	CH ₂	Sub-27
1-3516	Sub-46	3,4-diCIPh	CO	CH ₂	Sub-28
1-3517	Sub-46	3,4-diCIPh	CO	CH ₂	Sub-29
1-3518	Sub-46	3,4-diCIPh	CO	CH ₂	Sub-30
1-3519	Sub-46	3,4-diCIPh	CO	CH ₂	Sub-31
1-3520	Sub-46	3,4-diCIPh	CO	CH ₂	Sub-32
1-3521	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-1
1-3522	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-2
1-3523	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-3
1-3524	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-4
1-3525	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-5
1-3526	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-6
1-3527	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-7
1-3528	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-8
1-3529	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-9
1-3530	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-10
1-3531	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-11
1-3532	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-12
1-3533	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-13
1-3534	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-14
1-3535	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-15
1-3536	Sub-47	3,4-diCIPh	CO	CH ₂	Sub-16

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3537	Sub-47	3,4-diClPh	CO	CH ₂	Sub-17
1-3538	Sub-47	3,4-diClPh	CO	CH ₂	Sub-18
1-3539	Sub-47	3,4-diClPh	CO	CH ₂	Sub-19
1-3540	Sub-47	3,4-diClPh	CO	CH ₂	Sub-20
1-3541	Sub-47	3,4-diClPh	CO	CH ₂	Sub-21
1-3542	Sub-47	3,4-diClPh	CO	CH ₂	Sub-22
1-3543	Sub-47	3,4-diClPh	CO	CH ₂	Sub-23
1-3544	Sub-47	3,4-diClPh	CO	CH ₂	Sub-24
1-3545	Sub-47	3,4-diClPh	CO	CH ₂	Sub-25
1-3546	Sub-47	3,4-diClPh	CO	CH ₂	Sub-26
1-3547	Sub-47	3,4-diClPh	CO	CH ₂	Sub-27
1-3548	Sub-47	3,4-diClPh	CO	CH ₂	Sub-28
1-3549	Sub-47	3,4-diClPh	CO	CH ₂	Sub-29
1-3550	Sub-47	3,4-diClPh	CO	CH ₂	Sub-30
1-3551	Sub-47	3,4-diClPh	CO	CH ₂	Sub-31
1-3552	Sub-47	3,4-diClPh	CO	CH ₂	Sub-32
1-3553	Sub-48	3,4-diClPh	CO	CH ₂	Sub-1
1-3554	Sub-48	3,4-diClPh	CO	CH ₂	Sub-2
1-3555	Sub-48	3,4-diClPh	CO	CH ₂	Sub-3
1-3556	Sub-48	3,4-diClPh	CO	CH ₂	Sub-4
1-3557	Sub-48	3,4-diClPh	CO	CH ₂	Sub-5
1-3558	Sub-48	3,4-diClPh	CO	CH ₂	Sub-6
1-3559	Sub-48	3,4-diClPh	CO	CH ₂	Sub-7
1-3560	Sub-48	3,4-diClPh	CO	CH ₂	Sub-8
1-3561	Sub-48	3,4-diClPh	CO	CH ₂	Sub-9
1-3562	Sub-48	3,4-diClPh	CO	CH ₂	Sub-10

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3563	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-11
1-3564	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-12
1-3565	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-13
1-3566	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-14
1-3567	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-15
1-3568	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-16
1-3569	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-17
1-3570	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-18
1-3571	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-19
1-3572	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-20
1-3573	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-21
1-3574	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-22
1-3575	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-23
1-3576	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-24
1-3577	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-25
1-3578	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-26
1-3579	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-27
1-3580	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-28
1-3581	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-29
1-3582	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-30
1-3583	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-31
1-3584	Sub-48	3,4-diCIPh	CO	CH ₂	Sub-32
1-3585	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-1
1-3586	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-2
1-3587	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-3
1-3588	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-4

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3589	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-5
1-3590	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-6
1-3591	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-7
1-3592	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-8
1-3593	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-9
1-3594	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-10
1-3595	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-11
1-3596	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-12
1-3597	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-13
1-3598	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-14
1-3599	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-15
1-3600	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-16
1-3601	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-17
1-3602	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-18
1-3603	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-19
1-3604	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-20
1-3605	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-21
1-3606	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-22
1-3607	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-23
1-3608	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-24
1-3609	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-25
1-3610	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-26
1-3611	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-27
1-3612	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-28
1-3613	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-29
1-3614	Sub-49	3,4-diCIPh	CO	CH ₂	Sub-30

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3615	Sub-49	3,4-diClPh	CO	CH ₂	Sub-31
1-3616	Sub-49	3,4-diClPh	CO	CH ₂	Sub-32
1-3617	Sub-50	3,4-diClPh	CO	CH ₂	Sub-1
1-3618	Sub-50	3,4-diClPh	CO	CH ₂	Sub-2
1-3619	Sub-50	3,4-diClPh	CO	CH ₂	Sub-3
1-3620	Sub-50	3,4-diClPh	CO	CH ₂	Sub-4
1-3621	Sub-50	3,4-diClPh	CO	CH ₂	Sub-5
1-3622	Sub-50	3,4-diClPh	CO	CH ₂	Sub-6
1-3623	Sub-50	3,4-diClPh	CO	CH ₂	Sub-7
1-3624	Sub-50	3,4-diClPh	CO	CH ₂	Sub-8
1-3625	Sub-50	3,4-diClPh	CO	CH ₂	Sub-9
1-3626	Sub-50	3,4-diClPh	CO	CH ₂	Sub-10
1-3627	Sub-50	3,4-diClPh	CO	CH ₂	Sub-11
1-3628	Sub-50	3,4-diClPh	CO	CH ₂	Sub-12
1-3629	Sub-50	3,4-diClPh	CO	CH ₂	Sub-13
1-3630	Sub-50	3,4-diClPh	CO	CH ₂	Sub-14
1-3631	Sub-50	3,4-diClPh	CO	CH ₂	Sub-15
1-3632	Sub-50	3,4-diClPh	CO	CH ₂	Sub-16
1-3633	Sub-50	3,4-diClPh	CO	CH ₂	Sub-17
1-3634	Sub-50	3,4-diClPh	CO	CH ₂	Sub-18
1-3635	Sub-50	3,4-diClPh	CO	CH ₂	Sub-19
1-3636	Sub-50	3,4-diClPh	CO	CH ₂	Sub-20
1-3637	Sub-50	3,4-diClPh	CO	CH ₂	Sub-21
1-3638	Sub-50	3,4-diClPh	CO	CH ₂	Sub-22
1-3639	Sub-50	3,4-diClPh	CO	CH ₂	Sub-23
1-3640	Sub-50	3,4-diClPh	CO	CH ₂	Sub-24

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3641	Sub-50	3,4-diClPh	CO	CH ₂	Sub-25
1-3642	Sub-50	3,4-diClPh	CO	CH ₂	Sub-26
1-3643	Sub-50	3,4-diClPh	CO	CH ₂	Sub-27
1-3644	Sub-50	3,4-diClPh	CO	CH ₂	Sub-28
1-3645	Sub-50	3,4-diClPh	CO	CH ₂	Sub-29
1-3646	Sub-50	3,4-diClPh	CO	CH ₂	Sub-30
1-3647	Sub-50	3,4-diClPh	CO	CH ₂	Sub-31
1-3648	Sub-50	3,4-diClPh	CO	CH ₂	Sub-32
1-3649	Sub-51	3,4-diClPh	CO	CH ₂	Sub-1
1-3650	Sub-51	3,4-diClPh	CO	CH ₂	Sub-2
1-3651	Sub-51	3,4-diClPh	CO	CH ₂	Sub-3
1-3652	Sub-51	3,4-diClPh	CO	CH ₂	Sub-4
1-3653	Sub-51	3,4-diClPh	CO	CH ₂	Sub-5
1-3654	Sub-51	3,4-diClPh	CO	CH ₂	Sub-6
1-3655	Sub-51	3,4-diClPh	CO	CH ₂	Sub-7
1-3656	Sub-51	3,4-diClPh	CO	CH ₂	Sub-8
1-3657	Sub-51	3,4-diClPh	CO	CH ₂	Sub-9
1-3658	Sub-51	3,4-diClPh	CO	CH ₂	Sub-10
1-3659	Sub-51	3,4-diClPh	CO	CH ₂	Sub-11
1-3660	Sub-51	3,4-diClPh	CO	CH ₂	Sub-12
1-3661	Sub-51	3,4-diClPh	CO	CH ₂	Sub-13
1-3662	Sub-51	3,4-diClPh	CO	CH ₂	Sub-14
1-3663	Sub-51	3,4-diClPh	CO	CH ₂	Sub-15
1-3664	Sub-51	3,4-diClPh	CO	CH ₂	Sub-16
1-3665	Sub-51	3,4-diClPh	CO	CH ₂	Sub-17
1-3666	Sub-51	3,4-diClPh	CO	CH ₂	Sub-18

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3667	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-19
1-3668	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-20
1-3669	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-21
1-3670	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-22
1-3671	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-23
1-3672	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-24
1-3673	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-25
1-3674	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-26
1-3675	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-27
1-3676	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-28
1-3677	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-29
1-3678	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-30
1-3679	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-31
1-3680	Sub-51	3,4-diCIPh	CO	CH ₂	Sub-32
1-3681	Sub-52	3,4-diCIPh	CO	CH ₂	Sub-1
1-3682	Sub-52	3,4-diCIPh	CO	CH ₂	Sub-2
1-3683	Sub-52	3,4-diCIPh	CO	CH ₂	Sub-3
1-3684	Sub-52	3,4-diCIPh	CO	CH ₂	Sub-4
1-3685	Sub-52	3,4-diCIPh	CO	CH ₂	Sub-5
1-3686	Sub-52	3,4-diCIPh	CO	CH ₂	Sub-6
1-3687	Sub-52	3,4-diCIPh	CO	CH ₂	Sub-7
1-3688	Sub-52	3,4-diCIPh	CO	CH ₂	Sub-8
1-3689	Sub-52	3,4-diCIPh	CO	CH ₂	Sub-9
1-3690	Sub-52	3,4-diCIPh	CO	CH ₂	Sub-10
1-3691	Sub-52	3,4-diCIPh	CO	CH ₂	Sub-11
1-3692	Sub-52	3,4-diCIPh	CO	CH ₂	Sub-12

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3693	Sub-52	3,4-diClPh	CO	CH ₂	Sub-13
1-3694	Sub-52	3,4-diClPh	CO	CH ₂	Sub-14
1-3695	Sub-52	3,4-diClPh	CO	CH ₂	Sub-15
1-3696	Sub-52	3,4-diClPh	CO	CH ₂	Sub-16
1-3697	Sub-52	3,4-diClPh	CO	CH ₂	Sub-17
1-3698	Sub-52	3,4-diClPh	CO	CH ₂	Sub-18
1-3699	Sub-52	3,4-diClPh	CO	CH ₂	Sub-19
1-3700	Sub-52	3,4-diClPh	CO	CH ₂	Sub-20
1-3701	Sub-52	3,4-diClPh	CO	CH ₂	Sub-21
1-3702	Sub-52	3,4-diClPh	CO	CH ₂	Sub-22
1-3703	Sub-52	3,4-diClPh	CO	CH ₂	Sub-23
1-3704	Sub-52	3,4-diClPh	CO	CH ₂	Sub-24
1-3705	Sub-52	3,4-diClPh	CO	CH ₂	Sub-25
1-3706	Sub-52	3,4-diClPh	CO	CH ₂	Sub-26
1-3707	Sub-52	3,4-diClPh	CO	CH ₂	Sub-27
1-3708	Sub-52	3,4-diClPh	CO	CH ₂	Sub-28
1-3709	Sub-52	3,4-diClPh	CO	CH ₂	Sub-29
1-3710	Sub-52	3,4-diClPh	CO	CH ₂	Sub-30
1-3711	Sub-52	3,4-diClPh	CO	CH ₂	Sub-31
1-3712	Sub-52	3,4-diClPh	CO	CH ₂	Sub-32
1-3713	Sub-53	3,4-diClPh	CO	CH ₂	Sub-1
1-3714	Sub-53	3,4-diClPh	CO	CH ₂	Sub-2
1-3715	Sub-53	3,4-diClPh	CO	CH ₂	Sub-3
1-3716	Sub-53	3,4-diClPh	CO	CH ₂	Sub-4
1-3717	Sub-53	3,4-diClPh	CO	CH ₂	Sub-5
1-3718	Sub-53	3,4-diClPh	CO	CH ₂	Sub-6

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3719	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-7
1-3720	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-8
1-3721	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-9
1-3722	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-10
1-3723	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-11
1-3724	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-12
1-3725	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-13
1-3726	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-14
1-3727	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-15
1-3728	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-16
1-3729	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-17
1-3730	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-18
1-3731	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-19
1-3732	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-20
1-3733	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-21
1-3734	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-22
1-3735	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-23
1-3736	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-24
1-3737	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-25
1-3738	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-26
1-3739	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-27
1-3740	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-28
1-3741	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-29
1-3742	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-30
1-3743	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-31
1-3744	Sub-53	3,4-diCIPh	CO	CH ₂	Sub-32

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3745	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-1
1-3746	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-2
1-3747	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-3
1-3748	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-4
1-3749	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-5
1-3750	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-6
1-3751	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-7
1-3752	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-8
1-3753	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-9
1-3754	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-10
1-3755	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-11
1-3756	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-12
1-3757	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-13
1-3758	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-14
1-3759	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-15
1-3760	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-16
1-3761	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-17
1-3762	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-18
1-3763	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-19
1-3764	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-20
1-3765	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-21
1-3766	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-22
1-3767	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-23
1-3768	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-24
1-3769	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-25
1-3770	Sub-54	3,4-diCIPh	CO	CH ₂	Sub-26

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3771	Sub-54	3,4-diClPh	CO	CH ₂	Sub-27
1-3772	Sub-54	3,4-diClPh	CO	CH ₂	Sub-28
1-3773	Sub-54	3,4-diClPh	CO	CH ₂	Sub-29
1-3774	Sub-54	3,4-diClPh	CO	CH ₂	Sub-30
1-3775	Sub-54	3,4-diClPh	CO	CH ₂	Sub-31
1-3776	Sub-54	3,4-diClPh	CO	CH ₂	Sub-32
1-3777	Sub-55	3,4-diClPh	CO	CH ₂	Sub-1
1-3778	Sub-55	3,4-diClPh	CO	CH ₂	Sub-2
1-3779	Sub-55	3,4-diClPh	CO	CH ₂	Sub-3
1-3780	Sub-55	3,4-diClPh	CO	CH ₂	Sub-4
1-3781	Sub-55	3,4-diClPh	CO	CH ₂	Sub-5
1-3782	Sub-55	3,4-diClPh	CO	CH ₂	Sub-6
1-3783	Sub-55	3,4-diClPh	CO	CH ₂	Sub-7
1-3784	Sub-55	3,4-diClPh	CO	CH ₂	Sub-8
1-3785	Sub-55	3,4-diClPh	CO	CH ₂	Sub-9
1-3786	Sub-55	3,4-diClPh	CO	CH ₂	Sub-10
1-3787	Sub-55	3,4-diClPh	CO	CH ₂	Sub-11
1-3788	Sub-55	3,4-diClPh	CO	CH ₂	Sub-12
1-3789	Sub-55	3,4-diClPh	CO	CH ₂	Sub-13
1-3790	Sub-55	3,4-diClPh	CO	CH ₂	Sub-14
1-3791	Sub-55	3,4-diClPh	CO	CH ₂	Sub-15
1-3792	Sub-55	3,4-diClPh	CO	CH ₂	Sub-16
1-3793	Sub-55	3,4-diClPh	CO	CH ₂	Sub-17
1-3794	Sub-55	3,4-diClPh	CO	CH ₂	Sub-18
1-3795	Sub-55	3,4-diClPh	CO	CH ₂	Sub-19
1-3796	Sub-55	3,4-diClPh	CO	CH ₂	Sub-20

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3797	Sub-55	3,4-diCIPh	CO	CH ₂	Sub-21
1-3798	Sub-55	3,4-diCIPh	CO	CH ₂	Sub-22
1-3799	Sub-55	3,4-diCIPh	CO	CH ₂	Sub-23
1-3800	Sub-55	3,4-diCIPh	CO	CH ₂	Sub-24
1-3801	Sub-55	3,4-diCIPh	CO	CH ₂	Sub-25
1-3802	Sub-55	3,4-diCIPh	CO	CH ₂	Sub-26
1-3803	Sub-55	3,4-diCIPh	CO	CH ₂	Sub-27
1-3804	Sub-55	3,4-diCIPh	CO	CH ₂	Sub-28
1-3805	Sub-55	3,4-diCIPh	CO	CH ₂	Sub-29
1-3806	Sub-55	3,4-diCIPh	CO	CH ₂	Sub-30
1-3807	Sub-55	3,4-diCIPh	CO	CH ₂	Sub-31
1-3808	Sub-55	3,4-diCIPh	CO	CH ₂	Sub-32
1-3809	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-1
1-3810	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-2
1-3811	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-3
1-3812	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-4
1-3813	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-5
1-3814	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-6
1-3815	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-7
1-3816	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-8
1-3817	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-9
1-3818	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-10
1-3819	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-11
1-3820	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-12
1-3821	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-13
1-3822	Sub-56	3,4-diCIPh	CO	CH ₂	Sub-14

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3823	Sub-56	3,4-diClPh	CO	CH ₂	Sub-15
1-3824	Sub-56	3,4-diClPh	CO	CH ₂	Sub-16
1-3825	Sub-56	3,4-diClPh	CO	CH ₂	Sub-17
1-3826	Sub-56	3,4-diClPh	CO	CH ₂	Sub-18
1-3827	Sub-56	3,4-diClPh	CO	CH ₂	Sub-19
1-3828	Sub-56	3,4-diClPh	CO	CH ₂	Sub-20
1-3829	Sub-56	3,4-diClPh	CO	CH ₂	Sub-21
1-3830	Sub-56	3,4-diClPh	CO	CH ₂	Sub-22
1-3831	Sub-56	3,4-diClPh	CO	CH ₂	Sub-23
1-3832	Sub-56	3,4-diClPh	CO	CH ₂	Sub-24
1-3833	Sub-56	3,4-diClPh	CO	CH ₂	Sub-25
1-3834	Sub-56	3,4-diClPh	CO	CH ₂	Sub-26
1-3835	Sub-56	3,4-diClPh	CO	CH ₂	Sub-27
1-3836	Sub-56	3,4-diClPh	CO	CH ₂	Sub-28
1-3837	Sub-56	3,4-diClPh	CO	CH ₂	Sub-29
1-3838	Sub-56	3,4-diClPh	CO	CH ₂	Sub-30
1-3839	Sub-56	3,4-diClPh	CO	CH ₂	Sub-31
1-3840	Sub-56	3,4-diClPh	CO	CH ₂	Sub-32
1-3841	Sub-57	3,4-diClPh	CO	CH ₂	Sub-1
1-3842	Sub-57	3,4-diClPh	CO	CH ₂	Sub-2
1-3843	Sub-57	3,4-diClPh	CO	CH ₂	Sub-3
1-3844	Sub-57	3,4-diClPh	CO	CH ₂	Sub-4
1-3845	Sub-57	3,4-diClPh	CO	CH ₂	Sub-5
1-3846	Sub-57	3,4-diClPh	CO	CH ₂	Sub-6
1-3847	Sub-57	3,4-diClPh	CO	CH ₂	Sub-7
1-3848	Sub-57	3,4-diClPh	CO	CH ₂	Sub-8

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3849	Sub-57	3,4-diClPh	CO	CH ₂	Sub-9
1-3850	Sub-57	3,4-diClPh	CO	CH ₂	Sub-10
1-3851	Sub-57	3,4-diClPh	CO	CH ₂	Sub-11
1-3852	Sub-57	3,4-diClPh	CO	CH ₂	Sub-12
1-3853	Sub-57	3,4-diClPh	CO	CH ₂	Sub-13
1-3854	Sub-57	3,4-diClPh	CO	CH ₂	Sub-14
1-3855	Sub-57	3,4-diClPh	CO	CH ₂	Sub-15
1-3856	Sub-57	3,4-diClPh	CO	CH ₂	Sub-16
1-3857	Sub-57	3,4-diClPh	CO	CH ₂	Sub-17
1-3858	Sub-57	3,4-diClPh	CO	CH ₂	Sub-18
1-3859	Sub-57	3,4-diClPh	CO	CH ₂	Sub-19
1-3860	Sub-57	3,4-diClPh	CO	CH ₂	Sub-20
1-3861	Sub-57	3,4-diClPh	CO	CH ₂	Sub-21
1-3862	Sub-57	3,4-diClPh	CO	CH ₂	Sub-22
1-3863	Sub-57	3,4-diClPh	CO	CH ₂	Sub-23
1-3864	Sub-57	3,4-diClPh	CO	CH ₂	Sub-24
1-3865	Sub-57	3,4-diClPh	CO	CH ₂	Sub-25
1-3866	Sub-57	3,4-diClPh	CO	CH ₂	Sub-26
1-3867	Sub-57	3,4-diClPh	CO	CH ₂	Sub-27
1-3868	Sub-57	3,4-diClPh	CO	CH ₂	Sub-28
1-3869	Sub-57	3,4-diClPh	CO	CH ₂	Sub-29
1-3870	Sub-57	3,4-diClPh	CO	CH ₂	Sub-30
1-3871	Sub-57	3,4-diClPh	CO	CH ₂	Sub-31
1-3872	Sub-57	3,4-diClPh	CO	CH ₂	Sub-32
1-3873	Sub-58	3,4-diClPh	CO	CH ₂	Sub-1
1-3874	Sub-58	3,4-diClPh	CO	CH ₂	Sub-2

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3875	Sub-58	3,4-diClPh	CO	CH ₂	Sub-3
1-3876	Sub-58	3,4-diClPh	CO	CH ₂	Sub-4
1-3877	Sub-58	3,4-diClPh	CO	CH ₂	Sub-5
1-3878	Sub-58	3,4-diClPh	CO	CH ₂	Sub-6
1-3879	Sub-58	3,4-diClPh	CO	CH ₂	Sub-7
1-3880	Sub-58	3,4-diClPh	CO	CH ₂	Sub-8
1-3881	Sub-58	3,4-diClPh	CO	CH ₂	Sub-9
1-3882	Sub-58	3,4-diClPh	CO	CH ₂	Sub-10
1-3883	Sub-58	3,4-diClPh	CO	CH ₂	Sub-11
1-3884	Sub-58	3,4-diClPh	CO	CH ₂	Sub-12
1-3885	Sub-58	3,4-diClPh	CO	CH ₂	Sub-13
1-3886	Sub-58	3,4-diClPh	CO	CH ₂	Sub-14
1-3887	Sub-58	3,4-diClPh	CO	CH ₂	Sub-15
1-3888	Sub-58	3,4-diClPh	CO	CH ₂	Sub-16
1-3889	Sub-58	3,4-diClPh	CO	CH ₂	Sub-17
1-3890	Sub-58	3,4-diClPh	CO	CH ₂	Sub-18
1-3891	Sub-58	3,4-diClPh	CO	CH ₂	Sub-19
1-3892	Sub-58	3,4-diClPh	CO	CH ₂	Sub-20
1-3893	Sub-58	3,4-diClPh	CO	CH ₂	Sub-21
1-3894	Sub-58	3,4-diClPh	CO	CH ₂	Sub-22
1-3895	Sub-58	3,4-diClPh	CO	CH ₂	Sub-23
1-3896	Sub-58	3,4-diClPh	CO	CH ₂	Sub-24
1-3897	Sub-58	3,4-diClPh	CO	CH ₂	Sub-25
1-3898	Sub-58	3,4-diClPh	CO	CH ₂	Sub-26
1-3899	Sub-58	3,4-diClPh	CO	CH ₂	Sub-27
1-3900	Sub-58	3,4-diClPh	CO	CH ₂	Sub-28

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3901	Sub-58	3,4-diClPh	CO	CH ₂	Sub-29
1-3902	Sub-58	3,4-diClPh	CO	CH ₂	Sub-30
1-3903	Sub-58	3,4-diClPh	CO	CH ₂	Sub-31
1-3904	Sub-58	3,4-diClPh	CO	CH ₂	Sub-32
1-3905	Sub-59	3,4-diClPh	CO	CH ₂	Sub-1
1-3906	Sub-59	3,4-diClPh	CO	CH ₂	Sub-2
1-3907	Sub-59	3,4-diClPh	CO	CH ₂	Sub-3
1-3908	Sub-59	3,4-diClPh	CO	CH ₂	Sub-4
1-3909	Sub-59	3,4-diClPh	CO	CH ₂	Sub-5
1-3910	Sub-59	3,4-diClPh	CO	CH ₂	Sub-6
1-3911	Sub-59	3,4-diClPh	CO	CH ₂	Sub-7
1-3912	Sub-59	3,4-diClPh	CO	CH ₂	Sub-8
1-3913	Sub-59	3,4-diClPh	CO	CH ₂	Sub-9
1-3914	Sub-59	3,4-diClPh	CO	CH ₂	Sub-10
1-3915	Sub-59	3,4-diClPh	CO	CH ₂	Sub-11
1-3916	Sub-59	3,4-diClPh	CO	CH ₂	Sub-12
1-3917	Sub-59	3,4-diClPh	CO	CH ₂	Sub-13
1-3918	Sub-59	3,4-diClPh	CO	CH ₂	Sub-14
1-3919	Sub-59	3,4-diClPh	CO	CH ₂	Sub-15
1-3920	Sub-59	3,4-diClPh	CO	CH ₂	Sub-16
1-3921	Sub-59	3,4-diClPh	CO	CH ₂	Sub-17
1-3922	Sub-59	3,4-diClPh	CO	CH ₂	Sub-18
1-3923	Sub-59	3,4-diClPh	CO	CH ₂	Sub-19
1-3924	Sub-59	3,4-diClPh	CO	CH ₂	Sub-20
1-3925	Sub-59	3,4-diClPh	CO	CH ₂	Sub-21
1-3926	Sub-59	3,4-diClPh	CO	CH ₂	Sub-22

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3927	Sub-59	3,4-diClPh	CO	CH ₂	Sub-23
1-3928	Sub-59	3,4-diClPh	CO	CH ₂	Sub-24
1-3929	Sub-59	3,4-diClPh	CO	CH ₂	Sub-25
1-3930	Sub-59	3,4-diClPh	CO	CH ₂	Sub-26
1-3931	Sub-59	3,4-diClPh	CO	CH ₂	Sub-27
1-3932	Sub-59	3,4-diClPh	CO	CH ₂	Sub-28
1-3933	Sub-59	3,4-diClPh	CO	CH ₂	Sub-29
1-3934	Sub-59	3,4-diClPh	CO	CH ₂	Sub-30
1-3935	Sub-59	3,4-diClPh	CO	CH ₂	Sub-31
1-3936	Sub-59	3,4-diClPh	CO	CH ₂	Sub-32
1-3937	Sub-60	3,4-diClPh	CO	CH ₂	Sub-1
1-3938	Sub-60	3,4-diClPh	CO	CH ₂	Sub-2
1-3939	Sub-60	3,4-diClPh	CO	CH ₂	Sub-3
1-3940	Sub-60	3,4-diClPh	CO	CH ₂	Sub-4
1-3941	Sub-60	3,4-diClPh	CO	CH ₂	Sub-5
1-3942	Sub-60	3,4-diClPh	CO	CH ₂	Sub-6
1-3943	Sub-60	3,4-diClPh	CO	CH ₂	Sub-7
1-3944	Sub-60	3,4-diClPh	CO	CH ₂	Sub-8
1-3945	Sub-60	3,4-diClPh	CO	CH ₂	Sub-9
1-3946	Sub-60	3,4-diClPh	CO	CH ₂	Sub-10
1-3947	Sub-60	3,4-diClPh	CO	CH ₂	Sub-11
1-3948	Sub-60	3,4-diClPh	CO	CH ₂	Sub-12
1-3949	Sub-60	3,4-diClPh	CO	CH ₂	Sub-13
1-3950	Sub-60	3,4-diClPh	CO	CH ₂	Sub-14
1-3951	Sub-60	3,4-diClPh	CO	CH ₂	Sub-15
1-3952	Sub-60	3,4-diClPh	CO	CH ₂	Sub-16

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3953	Sub-60	3,4-diClPh	CO	CH ₂	Sub-17
1-3954	Sub-60	3,4-diClPh	CO	CH ₂	Sub-18
1-3955	Sub-60	3,4-diClPh	CO	CH ₂	Sub-19
1-3956	Sub-60	3,4-diClPh	CO	CH ₂	Sub-20
1-3957	Sub-60	3,4-diClPh	CO	CH ₂	Sub-21
1-3958	Sub-60	3,4-diClPh	CO	CH ₂	Sub-22
1-3959	Sub-60	3,4-diClPh	CO	CH ₂	Sub-23
1-3960	Sub-60	3,4-diClPh	CO	CH ₂	Sub-24
1-3961	Sub-60	3,4-diClPh	CO	CH ₂	Sub-25
1-3962	Sub-60	3,4-diClPh	CO	CH ₂	Sub-26
1-3963	Sub-60	3,4-diClPh	CO	CH ₂	Sub-27
1-3964	Sub-60	3,4-diClPh	CO	CH ₂	Sub-28
1-3965	Sub-60	3,4-diClPh	CO	CH ₂	Sub-29
1-3966	Sub-60	3,4-diClPh	CO	CH ₂	Sub-30
1-3967	Sub-60	3,4-diClPh	CO	CH ₂	Sub-31
1-3968	Sub-60	3,4-diClPh	CO	CH ₂	Sub-32
1-3969	Sub-61	3,4-diClPh	CO	CH ₂	Sub-1
1-3970	Sub-61	3,4-diClPh	CO	CH ₂	Sub-2
1-3971	Sub-61	3,4-diClPh	CO	CH ₂	Sub-3
1-3972	Sub-61	3,4-diClPh	CO	CH ₂	Sub-4
1-3973	Sub-61	3,4-diClPh	CO	CH ₂	Sub-5
1-3974	Sub-61	3,4-diClPh	CO	CH ₂	Sub-6
1-3975	Sub-61	3,4-diClPh	CO	CH ₂	Sub-7
1-3976	Sub-61	3,4-diClPh	CO	CH ₂	Sub-8
1-3977	Sub-61	3,4-diClPh	CO	CH ₂	Sub-9
1-3978	Sub-61	3,4-diClPh	CO	CH ₂	Sub-10

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-3979	Sub-61	3,4-diClPh	CO	CH ₂	Sub-11
1-3980	Sub-61	3,4-diClPh	CO	CH ₂	Sub-12
1-3981	Sub-61	3,4-diClPh	CO	CH ₂	Sub-13
1-3982	Sub-61	3,4-diClPh	CO	CH ₂	Sub-14
1-3983	Sub-61	3,4-diClPh	CO	CH ₂	Sub-15
1-3984	Sub-61	3,4-diClPh	CO	CH ₂	Sub-16
1-3985	Sub-61	3,4-diClPh	CO	CH ₂	Sub-17
1-3986	Sub-61	3,4-diClPh	CO	CH ₂	Sub-18
1-3987	Sub-61	3,4-diClPh	CO	CH ₂	Sub-19
1-3988	Sub-61	3,4-diClPh	CO	CH ₂	Sub-20
1-3989	Sub-61	3,4-diClPh	CO	CH ₂	Sub-21
1-3990	Sub-61	3,4-diClPh	CO	CH ₂	Sub-22
1-3991	Sub-61	3,4-diClPh	CO	CH ₂	Sub-23
1-3992	Sub-61	3,4-diClPh	CO	CH ₂	Sub-24
1-3993	Sub-61	3,4-diClPh	CO	CH ₂	Sub-25
1-3994	Sub-61	3,4-diClPh	CO	CH ₂	Sub-26
1-3995	Sub-61	3,4-diClPh	CO	CH ₂	Sub-27
1-3996	Sub-61	3,4-diClPh	CO	CH ₂	Sub-28
1-3997	Sub-61	3,4-diClPh	CO	CH ₂	Sub-29
1-3998	Sub-61	3,4-diClPh	CO	CH ₂	Sub-30
1-3999	Sub-61	3,4-diClPh	CO	CH ₂	Sub-31
1-4000	Sub-61	3,4-diClPh	CO	CH ₂	Sub-32
1-4001	Sub-62	3,4-diClPh	CO	CH ₂	Sub-1
1-4002	Sub-62	3,4-diClPh	CO	CH ₂	Sub-2
1-4003	Sub-62	3,4-diClPh	CO	CH ₂	Sub-3
1-4004	Sub-62	3,4-diClPh	CO	CH ₂	Sub-4

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-4005	Sub-62	3,4-diClPh	CO	CH ₂	Sub-5
1-4006	Sub-62	3,4-diClPh	CO	CH ₂	Sub-6
1-4007	Sub-62	3,4-diClPh	CO	CH ₂	Sub-7
1-4008	Sub-62	3,4-diClPh	CO	CH ₂	Sub-8
1-4009	Sub-62	3,4-diClPh	CO	CH ₂	Sub-9
1-4010	Sub-62	3,4-diClPh	CO	CH ₂	Sub-10
1-4011	Sub-62	3,4-diClPh	CO	CH ₂	Sub-11
1-4012	Sub-62	3,4-diClPh	CO	CH ₂	Sub-12
1-4013	Sub-62	3,4-diClPh	CO	CH ₂	Sub-13
1-4014	Sub-62	3,4-diClPh	CO	CH ₂	Sub-14
1-4015	Sub-62	3,4-diClPh	CO	CH ₂	Sub-15
1-4016	Sub-62	3,4-diClPh	CO	CH ₂	Sub-16
1-4017	Sub-62	3,4-diClPh	CO	CH ₂	Sub-17
1-4018	Sub-62	3,4-diClPh	CO	CH ₂	Sub-18
1-4019	Sub-62	3,4-diClPh	CO	CH ₂	Sub-19
1-4020	Sub-62	3,4-diClPh	CO	CH ₂	Sub-20
1-4021	Sub-62	3,4-diClPh	CO	CH ₂	Sub-21
1-4022	Sub-62	3,4-diClPh	CO	CH ₂	Sub-22
1-4023	Sub-62	3,4-diClPh	CO	CH ₂	Sub-23
1-4024	Sub-62	3,4-diClPh	CO	CH ₂	Sub-24
1-4025	Sub-62	3,4-diClPh	CO	CH ₂	Sub-25
1-4026	Sub-62	3,4-diClPh	CO	CH ₂	Sub-26
1-4027	Sub-62	3,4-diClPh	CO	CH ₂	Sub-27
1-4028	Sub-62	3,4-diClPh	CO	CH ₂	Sub-28
1-4029	Sub-62	3,4-diClPh	CO	CH ₂	Sub-29
1-4030	Sub-62	3,4-diClPh	CO	CH ₂	Sub-30

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-4031	Sub-62	3,4-diCIPh	CO	CH ₂	Sub-31
1-4032	Sub-62	3,4-diCIPh	CO	CH ₂	Sub-32
1-4033	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-1
1-4034	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-2
1-4035	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-3
1-4036	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-4
1-4037	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-5
1-4038	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-6
1-4039	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-7
1-4040	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-8
1-4041	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-9
1-4042	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-10
1-4043	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-11
1-4044	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-12
1-4045	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-13
1-4046	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-14
1-4047	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-15
1-4048	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-16
1-4049	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-17
1-4050	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-18
1-4051	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-19
1-4052	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-20
1-4053	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-21
1-4054	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-22
1-4055	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-23
1-4056	Sub-63	3,4-diCIPh	CO	CH ₂	Sub-24

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-4057	Sub-63	3,4-diClPh	CO	CH ₂	Sub-25
1-4058	Sub-63	3,4-diClPh	CO	CH ₂	Sub-26
1-4059	Sub-63	3,4-diClPh	CO	CH ₂	Sub-27
1-4060	Sub-63	3,4-diClPh	CO	CH ₂	Sub-28
1-4061	Sub-63	3,4-diClPh	CO	CH ₂	Sub-29
1-4062	Sub-63	3,4-diClPh	CO	CH ₂	Sub-30
1-4063	Sub-63	3,4-diClPh	CO	CH ₂	Sub-31
1-4064	Sub-63	3,4-diClPh	CO	CH ₂	Sub-32
1-4065	Sub-64	3,4-diClPh	CO	CH ₂	Sub-1
1-4066	Sub-64	3,4-diClPh	CO	CH ₂	Sub-2
1-4067	Sub-64	3,4-diClPh	CO	CH ₂	Sub-3
1-4068	Sub-64	3,4-diClPh	CO	CH ₂	Sub-4
1-4069	Sub-64	3,4-diClPh	CO	CH ₂	Sub-5
1-4070	Sub-64	3,4-diClPh	CO	CH ₂	Sub-6
1-4071	Sub-64	3,4-diClPh	CO	CH ₂	Sub-7
1-4072	Sub-64	3,4-diClPh	CO	CH ₂	Sub-8
1-4073	Sub-64	3,4-diClPh	CO	CH ₂	Sub-9
1-4074	Sub-64	3,4-diClPh	CO	CH ₂	Sub-10
1-4075	Sub-64	3,4-diClPh	CO	CH ₂	Sub-11
1-4076	Sub-64	3,4-diClPh	CO	CH ₂	Sub-12
1-4077	Sub-64	3,4-diClPh	CO	CH ₂	Sub-13
1-4078	Sub-64	3,4-diClPh	CO	CH ₂	Sub-14
1-4079	Sub-64	3,4-diClPh	CO	CH ₂	Sub-15
1-4080	Sub-64	3,4-diClPh	CO	CH ₂	Sub-16
1-4081	Sub-64	3,4-diClPh	CO	CH ₂	Sub-17
1-4082	Sub-64	3,4-diClPh	CO	CH ₂	Sub-18

Table 1 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
1-4083	Sub-64	3,4-diClPh	CO	CH ₂	Sub-19
1-4084	Sub-64	3,4-diClPh	CO	CH ₂	Sub-20
1-4085	Sub-64	3,4-diClPh	CO	CH ₂	Sub-21
1-4086	Sub-64	3,4-diClPh	CO	CH ₂	Sub-22
1-4087	Sub-64	3,4-diClPh	CO	CH ₂	Sub-23
1-4088	Sub-64	3,4-diClPh	CO	CH ₂	Sub-24
1-4089	Sub-64	3,4-diClPh	CO	CH ₂	Sub-25
1-4090	Sub-64	3,4-diClPh	CO	CH ₂	Sub-26
1-4091	Sub-64	3,4-diClPh	CO	CH ₂	Sub-27
1-4092	Sub-64	3,4-diClPh	CO	CH ₂	Sub-28
1-4093	Sub-64	3,4-diClPh	CO	CH ₂	Sub-29
1-4094	Sub-64	3,4-diClPh	CO	CH ₂	Sub-30
1-4095	Sub-64	3,4-diClPh	CO	CH ₂	Sub-31
1-4096	Sub-64	3,4-diClPh	CO	CH ₂	Sub-32

Table 2

Cpd. No.	R ¹	R ²	A	B	Z
2-1	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-1
2-2	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-2
2-3	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-3
2-4	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-4
2-5	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-5
2-6	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-6
2-7	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-7
2-8	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-8
2-9	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-9
2-10	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-10
2-11	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-11
2-12	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-12
2-13	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-13
2-14	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-14
2-15	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-15
2-16	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-16
2-17	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-17
2-18	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-18
2-19	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-19
2-20	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-20
2-21	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-21
2-22	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-22
2-23	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-23
2-24	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-24
2-25	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-25
2-26	Sub-33	3,4-diClPh	CH ₂	Single bond	Sub-26

Table 2

Cpd. No.	R ¹	R ²	A	B	Z
2-27	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-27
2-28	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-28
2-29	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-29
2-30	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-30
2-31	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-31
2-32	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-32
2-33	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-65
2-34	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-66
2-35	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-67
2-36	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-68
2-37	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-69
2-38	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-70
2-39	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-71
2-40	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-72
2-41	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-73
2-42	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-74
2-43	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-75
2-44	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-76
2-45	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-77
2-46	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-78
2-47	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-79
2-48	Sub-33	3,4-diCIPh	CH ₂	Single bond	Sub-80
2-49	Sub-34	3,4-diCIPh	CH ₂	Single bond	Sub-1
2-50	Sub-34	3,4-diCIPh	CH ₂	Single bond	Sub-2
2-51	Sub-34	3,4-diCIPh	CH ₂	Single bond	Sub-3
2-52	Sub-34	3,4-diCIPh	CH ₂	Single bond	Sub-4

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-53	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-5
2-54	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-6
2-55	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-7
2-56	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-8
2-57	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-9
2-58	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-10
2-59	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-11
2-60	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-12
2-61	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-13
2-62	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-14
2-63	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-15
2-64	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-16
2-65	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-17
2-66	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-18
2-67	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-19
2-68	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-20
2-69	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-21
2-70	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-22
2-71	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-23
2-72	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-24
2-73	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-25
2-74	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-26
2-75	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-27
2-76	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-28
2-77	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-29
2-78	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-30

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-79	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-31
2-80	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-32
2-81	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-65
2-82	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-66
2-83	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-67
2-84	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-68
2-85	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-69
2-86	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-70
2-87	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-71
2-88	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-72
2-89	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-73
2-90	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-74
2-91	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-75
2-92	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-76
2-93	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-77
2-94	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-78
2-95	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-79
2-96	Sub-34	3,4-diClPh	CH ₂	Single bond	Sub-80
2-97	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-1
2-98	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-2
2-99	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-3
2-100	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-4
2-101	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-5
2-102	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-6
2-103	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-7
2-104	Sub-35	3,4-diClPh	CH ₂	Single bond	Sub-8

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-105	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-9
2-106	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-10
2-107	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-11
2-108	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-12
2-109	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-13
2-110	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-14
2-111	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-15
2-112	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-16
2-113	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-17
2-114	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-18
2-115	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-19
2-116	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-20
2-117	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-21
2-118	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-22
2-119	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-23
2-120	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-24
2-121	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-25
2-122	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-26
2-123	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-27
2-124	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-28
2-125	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-29
2-126	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-30
2-127	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-31
2-128	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-32
2-129	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-65
2-130	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-66

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-131	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-67
2-132	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-68
2-133	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-69
2-134	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-70
2-135	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-71
2-136	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-72
2-137	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-73
2-138	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-74
2-139	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-75
2-140	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-76
2-141	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-77
2-142	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-78
2-143	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-79
2-144	Sub-35	3,4-diCIPh	CH ₂	Single bond	Sub-80
2-145	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-1
2-146	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-2
2-147	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-3
2-148	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-4
2-149	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-5
2-150	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-6
2-151	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-7
2-152	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-8
2-153	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-9
2-154	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-10
2-155	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-11
2-156	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-12

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-157	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-13
2-158	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-14
2-159	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-15
2-160	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-16
2-161	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-17
2-162	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-18
2-163	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-19
2-164	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-20
2-165	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-21
2-166	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-22
2-167	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-23
2-168	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-24
2-169	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-25
2-170	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-26
2-171	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-27
2-172	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-28
2-173	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-29
2-174	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-30
2-175	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-31
2-176	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-32
2-177	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-65
2-178	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-66
2-179	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-67
2-180	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-68
2-181	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-69
2-182	Sub-36	3,4-diCIPh	CH ₂	Single bond	Sub-70

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-183	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-71
2-184	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-72
2-185	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-73
2-186	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-74
2-187	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-75
2-188	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-76
2-189	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-77
2-190	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-78
2-191	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-79
2-192	Sub-36	3,4-diClPh	CH ₂	Single bond	Sub-80
2-193	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-1
2-194	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-2
2-195	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-3
2-196	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-4
2-197	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-5
2-198	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-6
2-199	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-7
2-200	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-8
2-201	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-9
2-202	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-10
2-203	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-11
2-204	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-12
2-205	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-13
2-206	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-14
2-207	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-15
2-208	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-16

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-209	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-17
2-210	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-18
2-211	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-19
2-212	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-20
2-213	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-21
2-214	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-22
2-215	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-23
2-216	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-24
2-217	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-25
2-218	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-26
2-219	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-27
2-220	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-28
2-221	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-29
2-222	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-30
2-223	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-31
2-224	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-32
2-225	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-65
2-226	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-66
2-227	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-67
2-228	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-68
2-229	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-69
2-230	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-70
2-231	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-71
2-232	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-72
2-233	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-73
2-234	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-74

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-235	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-75
2-236	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-76
2-237	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-77
2-238	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-78
2-239	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-79
2-240	Sub-37	3,4-diClPh	CH ₂	Single bond	Sub-80
2-241	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-1
2-242	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-2
2-243	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-3
2-244	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-4
2-245	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-5
2-246	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-6
2-247	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-7
2-248	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-8
2-249	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-9
2-250	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-10
2-251	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-11
2-252	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-12
2-253	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-13
2-254	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-14
2-255	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-15
2-256	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-16
2-257	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-17
2-258	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-18
2-259	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-19
2-260	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-20

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-261	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-21
2-262	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-22
2-263	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-23
2-264	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-24
2-265	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-25
2-266	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-26
2-267	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-27
2-268	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-28
2-269	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-29
2-270	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-30
2-271	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-31
2-272	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-32
2-273	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-65
2-274	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-66
2-275	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-67
2-276	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-68
2-277	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-69
2-278	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-70
2-279	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-71
2-280	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-72
2-281	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-73
2-282	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-74
2-283	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-75
2-284	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-76
2-285	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-77
2-286	Sub-38	3,4-diClPh	CH ₂	Single bond	Sub-78

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-287	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-79
2-288	Sub-38	3,4-diCIPh	CH ₂	Single bond	Sub-80
2-289	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-1
2-290	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-2
2-291	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-3
2-292	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-4
2-293	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-5
2-294	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-6
2-295	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-7
2-296	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-8
2-297	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-9
2-298	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-10
2-299	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-11
2-300	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-12
2-301	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-13
2-302	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-14
2-303	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-15
2-304	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-16
2-305	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-17
2-306	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-18
2-307	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-19
2-308	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-20
2-309	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-21
2-310	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-22
2-311	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-23
2-312	Sub-39	3,4-diCIPh	CH ₂	Single bond	Sub-24

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-313	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-25
2-314	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-26
2-315	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-27
2-316	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-28
2-317	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-29
2-318	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-30
2-319	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-31
2-320	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-32
2-321	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-65
2-322	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-66
2-323	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-67
2-324	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-68
2-325	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-69
2-326	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-70
2-327	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-71
2-328	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-72
2-329	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-73
2-330	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-74
2-331	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-75
2-332	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-76
2-333	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-77
2-334	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-78
2-335	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-79
2-336	Sub-39	3,4-diClPh	CH ₂	Single bond	Sub-80
2-337	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-1
2-338	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-2

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-339	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-3
2-340	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-4
2-341	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-5
2-342	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-6
2-343	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-7
2-344	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-8
2-345	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-9
2-346	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-10
2-347	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-11
2-348	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-12
2-349	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-13
2-350	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-14
2-351	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-15
2-352	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-16
2-353	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-17
2-354	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-18
2-355	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-19
2-356	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-20
2-357	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-21
2-358	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-22
2-359	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-23
2-360	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-24
2-361	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-25
2-362	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-26
2-363	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-27
2-364	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-28

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-365	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-29
2-366	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-30
2-367	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-31
2-368	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-32
2-369	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-65
2-370	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-66
2-371	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-67
2-372	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-68
2-373	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-69
2-374	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-70
2-375	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-71
2-376	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-72
2-377	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-73
2-378	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-74
2-379	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-75
2-380	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-76
2-381	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-77
2-382	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-78
2-383	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-79
2-384	Sub-40	3,4-diClPh	CH ₂	Single bond	Sub-80
2-385	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-1
2-386	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-2
2-387	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-3
2-388	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-4
2-389	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-5
2-390	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-6

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-391	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-7
2-392	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-8
2-393	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-9
2-394	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-10
2-395	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-11
2-396	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-12
2-397	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-13
2-398	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-14
2-399	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-15
2-400	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-16
2-401	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-17
2-402	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-18
2-403	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-19
2-404	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-20
2-405	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-21
2-406	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-22
2-407	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-23
2-408	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-24
2-409	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-25
2-410	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-26
2-411	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-27
2-412	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-28
2-413	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-29
2-414	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-30
2-415	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-31
2-416	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-32

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-417	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-65
2-418	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-66
2-419	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-67
2-420	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-68
2-421	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-69
2-422	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-70
2-423	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-71
2-424	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-72
2-425	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-73
2-426	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-74
2-427	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-75
2-428	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-76
2-429	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-77
2-430	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-78
2-431	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-79
2-432	Sub-41	3,4-diClPh	CH ₂	Single bond	Sub-80
2-433	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-1
2-434	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-2
2-435	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-3
2-436	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-4
2-437	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-5
2-438	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-6
2-439	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-7
2-440	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-8
2-441	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-9
2-442	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-10

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-443	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-11
2-444	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-12
2-445	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-13
2-446	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-14
2-447	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-15
2-448	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-16
2-449	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-17
2-450	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-18
2-451	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-19
2-452	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-20
2-453	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-21
2-454	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-22
2-455	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-23
2-456	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-24
2-457	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-25
2-458	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-26
2-459	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-27
2-460	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-28
2-461	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-29
2-462	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-30
2-463	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-31
2-464	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-32
2-465	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-65
2-466	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-66
2-467	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-67
2-468	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-68

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-469	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-69
2-470	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-70
2-471	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-71
2-472	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-72
2-473	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-73
2-474	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-74
2-475	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-75
2-476	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-76
2-477	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-77
2-478	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-78
2-479	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-79
2-480	Sub-42	3,4-diClPh	CH ₂	Single bond	Sub-80
2-481	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-1
2-482	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-2
2-483	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-3
2-484	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-4
2-485	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-5
2-486	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-6
2-487	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-7
2-488	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-8
2-489	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-9
2-490	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-10
2-491	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-11
2-492	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-12
2-493	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-13
2-494	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-14

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-495	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-15
2-496	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-16
2-497	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-17
2-498	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-18
2-499	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-19
2-500	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-20
2-501	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-21
2-502	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-22
2-503	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-23
2-504	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-24
2-505	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-25
2-506	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-26
2-507	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-27
2-508	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-28
2-509	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-29
2-510	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-30
2-511	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-31
2-512	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-32
2-513	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-65
2-514	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-66
2-515	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-67
2-516	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-68
2-517	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-69
2-518	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-70
2-519	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-71
2-520	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-72

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-521	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-73
2-522	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-74
2-523	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-75
2-524	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-76
2-525	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-77
2-526	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-78
2-527	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-79
2-528	Sub-43	3,4-diClPh	CH ₂	Single bond	Sub-80
2-529	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-1
2-530	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-2
2-531	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-3
2-532	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-4
2-533	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-5
2-534	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-6
2-535	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-7
2-536	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-8
2-537	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-9
2-538	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-10
2-539	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-11
2-540	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-12
2-541	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-13
2-542	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-14
2-543	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-15
2-544	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-16
2-545	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-17
2-546	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-18

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-547	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-19
2-548	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-20
2-549	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-21
2-550	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-22
2-551	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-23
2-552	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-24
2-553	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-25
2-554	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-26
2-555	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-27
2-556	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-28
2-557	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-29
2-558	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-30
2-559	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-31
2-560	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-32
2-561	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-65
2-562	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-66
2-563	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-67
2-564	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-68
2-565	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-69
2-566	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-70
2-567	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-71
2-568	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-72
2-569	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-73
2-570	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-74
2-571	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-75
2-572	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-76

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-573	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-77
2-574	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-78
2-575	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-79
2-576	Sub-44	3,4-diClPh	CH ₂	Single bond	Sub-80
2-577	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-1
2-578	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-2
2-579	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-3
2-580	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-4
2-581	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-5
2-582	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-6
2-583	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-7
2-584	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-8
2-585	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-9
2-586	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-10
2-587	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-11
2-588	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-12
2-589	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-13
2-590	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-14
2-591	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-15
2-592	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-16
2-593	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-17
2-594	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-18
2-595	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-19
2-596	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-20
2-597	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-21
2-598	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-22

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-599	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-23
2-600	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-24
2-601	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-25
2-602	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-26
2-603	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-27
2-604	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-28
2-605	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-29
2-606	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-30
2-607	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-31
2-608	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-32
2-609	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-65
2-610	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-66
2-611	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-67
2-612	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-68
2-613	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-69
2-614	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-70
2-615	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-71
2-616	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-72
2-617	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-73
2-618	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-74
2-619	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-75
2-620	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-76
2-621	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-77
2-622	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-78
2-623	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-79
2-624	Sub-45	3,4-diClPh	CH ₂	Single bond	Sub-80

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-625	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-1
2-626	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-2
2-627	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-3
2-628	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-4
2-629	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-5
2-630	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-6
2-631	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-7
2-632	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-8
2-633	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-9
2-634	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-10
2-635	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-11
2-636	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-12
2-637	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-13
2-638	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-14
2-639	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-15
2-640	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-16
2-641	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-17
2-642	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-18
2-643	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-19
2-644	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-20
2-645	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-21
2-646	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-22
2-647	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-23
2-648	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-24
2-649	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-25
2-650	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-26

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-651	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-27
2-652	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-28
2-653	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-29
2-654	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-30
2-655	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-31
2-656	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-32
2-657	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-65
2-658	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-66
2-659	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-67
2-660	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-68
2-661	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-69
2-662	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-70
2-663	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-71
2-664	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-72
2-665	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-73
2-666	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-74
2-667	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-75
2-668	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-76
2-669	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-77
2-670	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-78
2-671	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-79
2-672	Sub-46	3,4-diClPh	CH ₂	Single bond	Sub-80
2-673	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-1
2-674	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-2
2-675	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-3
2-676	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-4

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-677	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-5
2-678	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-6
2-679	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-7
2-680	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-8
2-681	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-9
2-682	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-10
2-683	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-11
2-684	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-12
2-685	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-13
2-686	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-14
2-687	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-15
2-688	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-16
2-689	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-17
2-690	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-18
2-691	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-19
2-692	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-20
2-693	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-21
2-694	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-22
2-695	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-23
2-696	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-24
2-697	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-25
2-698	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-26
2-699	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-27
2-700	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-28
2-701	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-29
2-702	Sub-47	3,4-diCIPh	CH ₂	Single bond	Sub-30

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-703	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-31
2-704	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-32
2-705	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-65
2-706	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-66
2-707	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-67
2-708	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-68
2-709	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-69
2-710	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-70
2-711	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-71
2-712	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-72
2-713	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-73
2-714	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-74
2-715	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-75
2-716	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-76
2-717	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-77
2-718	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-78
2-719	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-79
2-720	Sub-47	3,4-diClPh	CH ₂	Single bond	Sub-80
2-721	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-1
2-722	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-2
2-723	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-3
2-724	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-4
2-725	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-5
2-726	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-6
2-727	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-7
2-728	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-8

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-729	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-9
2-730	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-10
2-731	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-11
2-732	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-12
2-733	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-13
2-734	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-14
2-735	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-15
2-736	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-16
2-737	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-17
2-738	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-18
2-739	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-19
2-740	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-20
2-741	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-21
2-742	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-22
2-743	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-23
2-744	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-24
2-745	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-25
2-746	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-26
2-747	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-27
2-748	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-28
2-749	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-29
2-750	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-30
2-751	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-31
2-752	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-32
2-753	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-65
2-754	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-66

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-755	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-67
2-756	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-68
2-757	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-69
2-758	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-70
2-759	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-71
2-760	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-72
2-761	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-73
2-762	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-74
2-763	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-75
2-764	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-76
2-765	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-77
2-766	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-78
2-767	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-79
2-768	Sub-81	3,4-diClPh	CH ₂	Single bond	Sub-80
2-769	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-1
2-770	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-2
2-771	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-3
2-772	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-4
2-773	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-5
2-774	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-6
2-775	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-7
2-776	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-8
2-777	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-9
2-778	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-10
2-779	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-11
2-780	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-12

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-781	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-13
2-782	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-14
2-783	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-15
2-784	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-16
2-785	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-17
2-786	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-18
2-787	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-19
2-788	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-20
2-789	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-21
2-790	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-22
2-791	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-23
2-792	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-24
2-793	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-25
2-794	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-26
2-795	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-27
2-796	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-28
2-797	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-29
2-798	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-30
2-799	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-31
2-800	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-32
2-801	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-65
2-802	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-66
2-803	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-67
2-804	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-68
2-805	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-69
2-806	Sub-48	3,4-diCIPh	CH ₂	Single bond	Sub-70

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-807	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-71
2-808	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-72
2-809	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-73
2-810	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-74
2-811	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-75
2-812	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-76
2-813	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-77
2-814	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-78
2-815	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-79
2-816	Sub-48	3,4-diClPh	CH ₂	Single bond	Sub-80
2-817	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-1
2-818	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-2
2-819	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-3
2-820	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-4
2-821	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-5
2-822	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-6
2-823	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-7
2-824	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-8
2-825	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-9
2-826	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-10
2-827	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-11
2-828	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-12
2-829	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-13
2-830	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-14
2-831	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-15
2-832	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-16

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-833	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-17
2-834	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-18
2-835	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-19
2-836	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-20
2-837	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-21
2-838	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-22
2-839	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-23
2-840	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-24
2-841	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-25
2-842	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-26
2-843	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-27
2-844	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-28
2-845	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-29
2-846	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-30
2-847	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-31
2-848	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-32
2-849	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-65
2-850	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-66
2-851	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-67
2-852	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-68
2-853	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-69
2-854	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-70
2-855	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-71
2-856	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-72
2-857	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-73
2-858	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-74

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-859	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-75
2-860	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-76
2-861	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-77
2-862	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-78
2-863	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-79
2-864	Sub-49	3,4-diClPh	CH ₂	Single bond	Sub-80
2-865	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-1
2-866	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-2
2-867	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-3
2-868	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-4
2-869	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-5
2-870	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-6
2-871	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-7
2-872	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-8
2-873	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-9
2-874	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-10
2-875	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-11
2-876	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-12
2-877	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-13
2-878	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-14
2-879	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-15
2-880	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-16
2-881	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-17
2-882	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-18
2-883	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-19
2-884	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-20

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-885	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-21
2-886	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-22
2-887	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-23
2-888	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-24
2-889	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-25
2-890	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-26
2-891	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-27
2-892	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-28
2-893	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-29
2-894	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-30
2-895	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-31
2-896	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-32
2-897	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-65
2-898	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-66
2-899	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-67
2-900	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-68
2-901	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-69
2-902	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-70
2-903	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-71
2-904	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-72
2-905	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-73
2-906	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-74
2-907	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-75
2-908	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-76
2-909	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-77
2-910	Sub-50	3,4-diCIPh	CH ₂	Single bond	Sub-78

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-911	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-79
2-912	Sub-50	3,4-diClPh	CH ₂	Single bond	Sub-80
2-913	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-1
2-914	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-2
2-915	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-3
2-916	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-4
2-917	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-5
2-918	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-6
2-919	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-7
2-920	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-8
2-921	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-9
2-922	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-10
2-923	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-11
2-924	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-12
2-925	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-13
2-926	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-14
2-927	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-15
2-928	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-16
2-929	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-17
2-930	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-18
2-931	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-19
2-932	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-20
2-933	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-21
2-934	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-22
2-935	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-23
2-936	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-24

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-937	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-25
2-938	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-26
2-939	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-27
2-940	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-28
2-941	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-29
2-942	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-30
2-943	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-31
2-944	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-32
2-945	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-65
2-946	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-66
2-947	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-67
2-948	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-68
2-949	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-69
2-950	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-70
2-951	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-71
2-952	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-72
2-953	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-73
2-954	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-74
2-955	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-75
2-956	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-76
2-957	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-77
2-958	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-78
2-959	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-79
2-960	Sub-51	3,4-diClPh	CH ₂	Single bond	Sub-80
2-961	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-1
2-962	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-2

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-963	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-3
2-964	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-4
2-965	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-5
2-966	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-6
2-967	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-7
2-968	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-8
2-969	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-9
2-970	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-10
2-971	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-11
2-972	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-12
2-973	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-13
2-974	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-14
2-975	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-15
2-976	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-16
2-977	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-17
2-978	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-18
2-979	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-19
2-980	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-20
2-981	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-21
2-982	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-22
2-983	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-23
2-984	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-24
2-985	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-25
2-986	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-26
2-987	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-27
2-988	Sub-52	3,4-diCIPh	CH ₂	Single bond	Sub-28

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-989	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-29
2-990	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-30
2-991	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-31
2-992	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-32
2-993	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-65
2-994	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-66
2-995	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-67
2-996	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-68
2-997	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-69
2-998	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-70
2-999	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-71
2-1000	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-72
2-1001	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-73
2-1002	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-74
2-1003	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-75
2-1004	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-76
2-1005	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-77
2-1006	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-78
2-1007	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-79
2-1008	Sub-52	3,4-diClPh	CH ₂	Single bond	Sub-80
2-1009	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-1
2-1010	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-2
2-1011	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-3
2-1012	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-4
2-1013	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-5
2-1014	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-6

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1015	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-7
2-1016	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-8
2-1017	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-9
2-1018	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-10
2-1019	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-11
2-1020	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-12
2-1021	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-13
2-1022	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-14
2-1023	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-15
2-1024	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-16
2-1025	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-17
2-1026	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-18
2-1027	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-19
2-1028	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-20
2-1029	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-21
2-1030	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-22
2-1031	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-23
2-1032	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-24
2-1033	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-25
2-1034	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-26
2-1035	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-27
2-1036	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-28
2-1037	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-29
2-1038	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-30
2-1039	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-31
2-1040	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-32

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1041	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-65
2-1042	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-66
2-1043	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-67
2-1044	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-68
2-1045	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-69
2-1046	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-70
2-1047	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-71
2-1048	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-72
2-1049	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-73
2-1050	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-74
2-1051	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-75
2-1052	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-76
2-1053	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-77
2-1054	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-78
2-1055	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-79
2-1056	Sub-53	3,4-diClPh	CH ₂	Single bond	Sub-80
2-1057	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-1
2-1058	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-2
2-1059	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-3
2-1060	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-4
2-1061	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-5
2-1062	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-6
2-1063	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-7
2-1064	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-8
2-1065	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-9
2-1066	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-10

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1067	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-11
2-1068	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-12
2-1069	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-13
2-1070	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-14
2-1071	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-15
2-1072	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-16
2-1073	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-17
2-1074	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-18
2-1075	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-19
2-1076	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-20
2-1077	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-21
2-1078	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-22
2-1079	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-23
2-1080	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-24
2-1081	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-25
2-1082	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-26
2-1083	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-27
2-1084	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-28
2-1085	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-29
2-1086	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-30
2-1087	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-31
2-1088	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-32
2-1089	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-65
2-1090	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-66
2-1091	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-67
2-1092	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-68

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1093	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-69
2-1094	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-70
2-1095	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-71
2-1096	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-72
2-1097	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-73
2-1098	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-74
2-1099	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-75
2-1100	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-76
2-1101	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-77
2-1102	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-78
2-1103	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-79
2-1104	Sub-54	3,4-diClPh	CH ₂	Single bond	Sub-80
2-1105	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-1
2-1106	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-2
2-1107	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-3
2-1108	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-4
2-1109	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-5
2-1110	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-6
2-1111	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-7
2-1112	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-8
2-1113	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-9
2-1114	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-10
2-1115	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-11
2-1116	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-12
2-1117	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-13
2-1118	Sub-55	3,4-diClPh	CH ₂	Single bond	Sub-14

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1119	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-15
2-1120	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-16
2-1121	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-17
2-1122	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-18
2-1123	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-19
2-1124	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-20
2-1125	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-21
2-1126	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-22
2-1127	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-23
2-1128	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-24
2-1129	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-25
2-1130	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-26
2-1131	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-27
2-1132	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-28
2-1133	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-29
2-1134	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-30
2-1135	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-31
2-1136	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-32
2-1137	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-65
2-1138	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-66
2-1139	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-67
2-1140	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-68
2-1141	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-69
2-1142	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-70
2-1143	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-71
2-1144	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-72

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1145	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-73
2-1146	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-74
2-1147	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-75
2-1148	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-76
2-1149	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-77
2-1150	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-78
2-1151	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-79
2-1152	Sub-55	3,4-diCIPh	CH ₂	Single bond	Sub-80
2-1153	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-1
2-1154	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-2
2-1155	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-3
2-1156	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-4
2-1157	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-5
2-1158	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-6
2-1159	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-7
2-1160	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-8
2-1161	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-9
2-1162	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-10
2-1163	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-11
2-1164	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-12
2-1165	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-13
2-1166	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-14
2-1167	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-15
2-1168	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-16
2-1169	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-17
2-1170	Sub-56	3,4-diCIPh	CH ₂	Single bond	Sub-18

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1171	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-19
2-1172	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-20
2-1173	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-21
2-1174	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-22
2-1175	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-23
2-1176	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-24
2-1177	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-25
2-1178	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-26
2-1179	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-27
2-1180	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-28
2-1181	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-29
2-1182	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-30
2-1183	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-31
2-1184	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-32
2-1185	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-65
2-1186	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-66
2-1187	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-67
2-1188	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-68
2-1189	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-69
2-1190	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-70
2-1191	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-71
2-1192	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-72
2-1193	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-73
2-1194	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-74
2-1195	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-75
2-1196	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-76

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1197	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-77
2-1198	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-78
2-1199	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-79
2-1200	Sub-56	3,4-diClPh	CH ₂	Single bond	Sub-80
2-1201	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-1
2-1202	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-2
2-1203	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-3
2-1204	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-4
2-1205	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-5
2-1206	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-6
2-1207	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-7
2-1208	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-8
2-1209	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-9
2-1210	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-10
2-1211	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-11
2-1212	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-12
2-1213	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-13
2-1214	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-14
2-1215	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-15
2-1216	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-16
2-1217	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-17
2-1218	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-18
2-1219	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-19
2-1220	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-20
2-1221	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-21
2-1222	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-22

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1223	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-23
2-1224	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-24
2-1225	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-25
2-1226	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-26
2-1227	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-27
2-1228	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-28
2-1229	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-29
2-1230	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-30
2-1231	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-31
2-1232	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-32
2-1233	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-65
2-1234	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-66
2-1235	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-67
2-1236	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-68
2-1237	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-69
2-1238	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-70
2-1239	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-71
2-1240	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-72
2-1241	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-73
2-1242	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-74
2-1243	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-75
2-1244	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-76
2-1245	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-77
2-1246	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-78
2-1247	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-79
2-1248	Sub-57	3,4-diClPh	CH ₂	Single bond	Sub-80

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1249	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-1
2-1250	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-2
2-1251	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-3
2-1252	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-4
2-1253	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-5
2-1254	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-6
2-1255	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-7
2-1256	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-8
2-1257	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-9
2-1258	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-10
2-1259	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-11
2-1260	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-12
2-1261	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-13
2-1262	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-14
2-1263	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-15
2-1264	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-16
2-1265	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-17
2-1266	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-18
2-1267	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-19
2-1268	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-20
2-1269	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-21
2-1270	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-22
2-1271	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-23
2-1272	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-24
2-1273	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-25
2-1274	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-26

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1275	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-27
2-1276	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-28
2-1277	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-29
2-1278	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-30
2-1279	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-31
2-1280	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-32
2-1281	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-65
2-1282	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-66
2-1283	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-67
2-1284	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-68
2-1285	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-69
2-1286	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-70
2-1287	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-71
2-1288	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-72
2-1289	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-73
2-1290	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-74
2-1291	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-75
2-1292	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-76
2-1293	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-77
2-1294	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-78
2-1295	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-79
2-1296	Sub-58	3,4-diClPh	CH ₂	Single bond	Sub-80
2-1297	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-1
2-1298	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-2
2-1299	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-3
2-1300	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-4

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1301	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-5
2-1302	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-6
2-1303	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-7
2-1304	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-8
2-1305	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-9
2-1306	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-10
2-1307	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-11
2-1308	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-12
2-1309	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-13
2-1310	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-14
2-1311	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-15
2-1312	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-16
2-1313	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-17
2-1314	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-18
2-1315	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-19
2-1316	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-20
2-1317	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-21
2-1318	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-22
2-1319	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-23
2-1320	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-24
2-1321	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-25
2-1322	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-26
2-1323	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-27
2-1324	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-28
2-1325	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-29
2-1326	Sub-59	3,4-diCIPh	CH ₂	Single bond	Sub-30

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1327	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-31
2-1328	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-32
2-1329	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-65
2-1330	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-66
2-1331	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-67
2-1332	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-68
2-1333	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-69
2-1334	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-70
2-1335	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-71
2-1336	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-72
2-1337	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-73
2-1338	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-74
2-1339	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-75
2-1340	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-76
2-1341	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-77
2-1342	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-78
2-1343	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-79
2-1344	Sub-59	3,4-diClPh	CH ₂	Single bond	Sub-80
2-1345	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-1
2-1346	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-2
2-1347	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-3
2-1348	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-4
2-1349	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-5
2-1350	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-6
2-1351	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-7
2-1352	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-8

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1353	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-9
2-1354	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-10
2-1355	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-11
2-1356	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-12
2-1357	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-13
2-1358	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-14
2-1359	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-15
2-1360	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-16
2-1361	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-17
2-1362	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-18
2-1363	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-19
2-1364	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-20
2-1365	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-21
2-1366	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-22
2-1367	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-23
2-1368	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-24
2-1369	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-25
2-1370	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-26
2-1371	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-27
2-1372	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-28
2-1373	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-29
2-1374	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-30
2-1375	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-31
2-1376	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-32
2-1377	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-65
2-1378	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-66

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1379	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-67
2-1380	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-68
2-1381	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-69
2-1382	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-70
2-1383	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-71
2-1384	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-72
2-1385	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-73
2-1386	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-74
2-1387	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-75
2-1388	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-76
2-1389	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-77
2-1390	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-78
2-1391	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-79
2-1392	Sub-82	3,4-diClPh	CH ₂	Single bond	Sub-80
2-1393	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-1
2-1394	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-2
2-1395	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-3
2-1396	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-4
2-1397	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-5
2-1398	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-6
2-1399	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-7
2-1400	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-8
2-1401	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-9
2-1402	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-10
2-1403	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-11
2-1404	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-12

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1405	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-13
2-1406	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-14
2-1407	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-15
2-1408	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-16
2-1409	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-17
2-1410	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-18
2-1411	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-19
2-1412	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-20
2-1413	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-21
2-1414	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-22
2-1415	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-23
2-1416	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-24
2-1417	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-25
2-1418	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-26
2-1419	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-27
2-1420	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-28
2-1421	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-29
2-1422	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-30
2-1423	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-31
2-1424	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-32
2-1425	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-65
2-1426	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-66
2-1427	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-67
2-1428	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-68
2-1429	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-69
2-1430	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-70

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1431	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-71
2-1432	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-72
2-1433	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-73
2-1434	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-74
2-1435	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-75
2-1436	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-76
2-1437	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-77
2-1438	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-78
2-1439	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-79
2-1440	Sub-83	3,4-diClPh	CH ₂	Single bond	Sub-80
2-1441	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-1
2-1442	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-2
2-1443	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-3
2-1444	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-4
2-1445	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-5
2-1446	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-6
2-1447	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-7
2-1448	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-8
2-1449	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-9
2-1450	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-10
2-1451	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-11
2-1452	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-12
2-1453	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-13
2-1454	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-14
2-1455	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-15
2-1456	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-16

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1457	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-17
2-1458	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-18
2-1459	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-19
2-1460	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-20
2-1461	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-21
2-1462	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-22
2-1463	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-23
2-1464	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-24
2-1465	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-25
2-1466	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-26
2-1467	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-27
2-1468	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-28
2-1469	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-29
2-1470	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-30
2-1471	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-31
2-1472	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-32
2-1473	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-65
2-1474	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-66
2-1475	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-67
2-1476	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-68
2-1477	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-69
2-1478	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-70
2-1479	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-71
2-1480	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-72
2-1481	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-73
2-1482	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-74

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1483	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-75
2-1484	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-76
2-1485	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-77
2-1486	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-78
2-1487	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-79
2-1488	Sub-61	3,4-diClPh	CH ₂	Single bond	Sub-80
2-1489	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-1
2-1490	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-2
2-1491	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-3
2-1492	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-4
2-1493	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-5
2-1494	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-6
2-1495	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-7
2-1496	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-8
2-1497	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-9
2-1498	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-10
2-1499	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-11
2-1500	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-12
2-1501	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-13
2-1502	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-14
2-1503	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-15
2-1504	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-16
2-1505	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-17
2-1506	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-18
2-1507	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-19
2-1508	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-20

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1509	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-21
2-1510	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-22
2-1511	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-23
2-1512	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-24
2-1513	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-25
2-1514	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-26
2-1515	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-27
2-1516	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-28
2-1517	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-29
2-1518	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-30
2-1519	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-31
2-1520	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-32
2-1521	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-65
2-1522	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-66
2-1523	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-67
2-1524	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-68
2-1525	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-69
2-1526	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-70
2-1527	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-71
2-1528	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-72
2-1529	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-73
2-1530	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-74
2-1531	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-75
2-1532	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-76
2-1533	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-77
2-1534	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-78

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1535	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-79
2-1536	Sub-60	3,4-diClPh	CH ₂	Single bond	Sub-80
2-1537	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-1538	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-1539	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-1540	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-1541	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-1542	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-1543	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-1544	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-1545	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-1546	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-1547	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-1548	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-1549	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-1550	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-1551	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-1552	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-1553	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-1554	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-1555	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-1556	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-1557	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-1558	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-1559	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-1560	Sub-33	3,4-diClPh	CO	Single bond or CH ₂	Sub-24

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1561	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-25
2-1562	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-26
2-1563	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-27
2-1564	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-28
2-1565	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-29
2-1566	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-30
2-1567	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-31
2-1568	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-32
2-1569	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-65
2-1570	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-66
2-1571	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-67
2-1572	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-68
2-1573	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-69
2-1574	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-70
2-1575	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-71
2-1576	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-72
2-1577	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-73
2-1578	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-74
2-1579	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-75
2-1580	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-76
2-1581	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-77
2-1582	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-78
2-1583	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-79
2-1584	Sub-33	3,4-diCIPh	CO	Single bond or CH ₂	Sub-80
2-1585	Sub-34	3,4-diCIPh	CO	Single bond or CH ₂	Sub-1
2-1586	Sub-34	3,4-diCIPh	CO	Single bond or CH ₂	Sub-2

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1587	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-1588	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-1589	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-1590	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-1591	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-1592	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-1593	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-1594	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-1595	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-1596	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-1597	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-1598	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-1599	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-1600	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-1601	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-1602	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-1603	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-1604	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-1605	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-1606	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-1607	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-1608	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-1609	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-1610	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-1611	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-1612	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-28

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1613	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-1614	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-1615	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-1616	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-1617	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-1618	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-1619	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-1620	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-1621	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-1622	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-1623	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-1624	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-1625	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-1626	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-1627	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-1628	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-1629	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-1630	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-1631	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-1632	Sub-34	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-1633	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-1634	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-1635	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-1636	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-1637	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-1638	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-6

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1639	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-1640	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-1641	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-1642	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-1643	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-1644	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-1645	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-1646	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-1647	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-1648	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-1649	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-1650	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-1651	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-1652	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-1653	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-1654	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-1655	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-1656	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-1657	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-1658	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-1659	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-1660	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-1661	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-1662	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-1663	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-1664	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-32

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1665	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-1666	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-1667	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-1668	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-1669	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-1670	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-1671	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-1672	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-1673	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-1674	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-1675	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-1676	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-1677	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-1678	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-1679	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-1680	Sub-35	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-1681	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-1682	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-1683	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-1684	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-1685	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-1686	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-1687	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-1688	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-1689	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-1690	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-10

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1691	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-1692	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-1693	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-1694	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-1695	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-1696	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-1697	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-1698	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-1699	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-1700	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-1701	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-1702	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-1703	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-1704	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-1705	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-1706	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-1707	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-1708	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-1709	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-1710	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-1711	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-1712	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-1713	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-1714	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-1715	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-1716	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-68

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1717	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-1718	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-1719	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-1720	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-1721	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-1722	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-1723	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-1724	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-1725	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-1726	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-1727	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-1728	Sub-36	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-1729	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-1730	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-1731	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-1732	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-1733	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-1734	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-1735	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-1736	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-1737	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-1738	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-1739	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-1740	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-1741	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-1742	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-14

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1743	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-1744	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-1745	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-1746	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-1747	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-1748	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-1749	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-1750	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-1751	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-1752	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-1753	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-1754	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-1755	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-1756	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-1757	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-1758	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-1759	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-1760	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-1761	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-1762	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-1763	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-1764	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-1765	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-1766	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-1767	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-1768	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-72

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1769	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-1770	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-1771	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-1772	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-1773	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-1774	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-1775	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-1776	Sub-37	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-1777	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-1778	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-1779	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-1780	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-1781	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-1782	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-1783	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-1784	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-1785	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-1786	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-1787	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-1788	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-1789	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-1790	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-1791	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-1792	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-1793	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-1794	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-18

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1795	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-19
2-1796	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-20
2-1797	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-21
2-1798	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-22
2-1799	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-23
2-1800	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-24
2-1801	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-25
2-1802	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-26
2-1803	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-27
2-1804	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-28
2-1805	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-29
2-1806	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-30
2-1807	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-31
2-1808	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-32
2-1809	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-65
2-1810	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-66
2-1811	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-67
2-1812	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-68
2-1813	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-69
2-1814	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-70
2-1815	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-71
2-1816	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-72
2-1817	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-73
2-1818	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-74
2-1819	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-75
2-1820	Sub-38	3,4-diCIPh	CO	Single bond or CH ₂	Sub-76

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1821	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-1822	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-1823	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-1824	Sub-38	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-1825	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-1826	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-1827	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-1828	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-1829	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-1830	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-1831	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-1832	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-1833	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-1834	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-1835	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-1836	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-1837	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-1838	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-1839	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-1840	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-1841	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-1842	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-1843	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-1844	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-1845	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-1846	Sub-39	3,4-diClPh	CO	Single bond or CH ₂	Sub-22

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1847	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-23
2-1848	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-24
2-1849	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-25
2-1850	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-26
2-1851	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-27
2-1852	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-28
2-1853	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-29
2-1854	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-30
2-1855	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-31
2-1856	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-32
2-1857	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-65
2-1858	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-66
2-1859	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-67
2-1860	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-68
2-1861	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-69
2-1862	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-70
2-1863	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-71
2-1864	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-72
2-1865	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-73
2-1866	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-74
2-1867	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-75
2-1868	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-76
2-1869	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-77
2-1870	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-78
2-1871	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-79
2-1872	Sub-39	3,4-diCIPh	CO	Single bond or CH ₂	Sub-80

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1873	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-1874	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-1875	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-1876	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-1877	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-1878	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-1879	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-1880	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-1881	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-1882	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-1883	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-1884	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-1885	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-1886	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-1887	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-1888	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-1889	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-1890	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-1891	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-1892	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-1893	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-1894	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-1895	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-1896	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-1897	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-1898	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-26

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1899	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-1900	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-1901	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-1902	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-1903	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-1904	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-1905	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-1906	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-1907	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-1908	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-1909	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-1910	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-1911	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-1912	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-1913	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-1914	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-1915	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-1916	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-1917	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-1918	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-1919	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-1920	Sub-40	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-1921	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-1922	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-1923	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-1924	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-4

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1925	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-1926	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-1927	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-1928	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-1929	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-1930	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-1931	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-1932	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-1933	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-1934	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-1935	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-1936	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-1937	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-1938	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-1939	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-1940	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-1941	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-1942	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-1943	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-1944	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-1945	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-1946	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-1947	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-1948	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-1949	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-1950	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-30

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1951	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-1952	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-1953	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-1954	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-1955	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-1956	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-1957	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-1958	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-1959	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-1960	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-1961	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-1962	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-1963	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-1964	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-1965	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-1966	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-1967	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-1968	Sub-41	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-1969	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-1970	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-1971	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-1972	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-1973	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-1974	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-1975	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-1976	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-8

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-1977	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-1978	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-1979	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-1980	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-1981	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-1982	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-1983	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-1984	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-1985	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-1986	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-1987	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-1988	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-1989	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-1990	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-1991	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-1992	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-1993	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-1994	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-1995	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-1996	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-1997	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-1998	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-1999	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2000	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2001	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2002	Sub-42	3,4-diClPh	CO	Single bond or CH ₂	Sub-66

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2003	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-67
2-2004	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-68
2-2005	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-69
2-2006	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-70
2-2007	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-71
2-2008	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-72
2-2009	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-73
2-2010	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-74
2-2011	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-75
2-2012	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-76
2-2013	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-77
2-2014	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-78
2-2015	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-79
2-2016	Sub-42	3,4-diCIPh	CO	Single bond or CH ₂	Sub-80
2-2017	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-1
2-2018	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-2
2-2019	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-3
2-2020	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-4
2-2021	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-5
2-2022	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-6
2-2023	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-7
2-2024	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-8
2-2025	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-9
2-2026	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-10
2-2027	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-11
2-2028	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-12

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2029	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2030	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2031	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2032	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2033	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2034	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2035	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2036	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2037	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2038	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2039	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2040	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2041	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2042	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2043	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2044	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2045	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2046	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2047	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2048	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2049	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2050	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2051	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2052	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2053	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2054	Sub-43	3,4-diClPh	CO	Single bond or CH ₂	Sub-70

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2055	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-71
2-2056	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-72
2-2057	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-73
2-2058	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-74
2-2059	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-75
2-2060	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-76
2-2061	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-77
2-2062	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-78
2-2063	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-79
2-2064	Sub-43	3,4-diCIPh	CO	Single bond or CH ₂	Sub-80
2-2065	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-1
2-2066	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-2
2-2067	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-3
2-2068	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-4
2-2069	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-5
2-2070	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-6
2-2071	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-7
2-2072	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-8
2-2073	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-9
2-2074	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-10
2-2075	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-11
2-2076	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-12
2-2077	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-13
2-2078	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-14
2-2079	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-15
2-2080	Sub-44	3,4-diCIPh	CO	Single bond or CH ₂	Sub-16

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2081	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2082	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2083	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2084	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2085	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2086	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2087	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2088	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2089	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2090	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2091	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2092	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2093	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2094	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2095	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2096	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2097	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2098	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2099	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2100	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2101	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2102	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2103	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2104	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2105	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2106	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-74

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2107	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2108	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2109	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2110	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2111	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2112	Sub-44	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2113	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2114	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2115	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2116	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2117	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2118	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2119	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2120	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2121	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2122	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2123	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2124	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2125	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2126	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2127	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2128	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2129	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2130	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2131	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2132	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-20

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2133	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-21
2-2134	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-22
2-2135	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-23
2-2136	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-24
2-2137	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-25
2-2138	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-26
2-2139	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-27
2-2140	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-28
2-2141	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-29
2-2142	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-30
2-2143	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-31
2-2144	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-32
2-2145	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-65
2-2146	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-66
2-2147	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-67
2-2148	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-68
2-2149	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-69
2-2150	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-70
2-2151	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-71
2-2152	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-72
2-2153	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-73
2-2154	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-74
2-2155	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-75
2-2156	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-76
2-2157	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-77
2-2158	Sub-45	3,4-diCIPh	CO	Single bond or CH ₂	Sub-78

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2159	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2160	Sub-45	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2161	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2162	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2163	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2164	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2165	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2166	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2167	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2168	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2169	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2170	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2171	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2172	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2173	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2174	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2175	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2176	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2177	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2178	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2179	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2180	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2181	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2182	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2183	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2184	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-24

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2185	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2186	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2187	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2188	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2189	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2190	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2191	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2192	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2193	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2194	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2195	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2196	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2197	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2198	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2199	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2200	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2201	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2202	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2203	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2204	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2205	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2206	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2207	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2208	Sub-46	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2209	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2210	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-2

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2211	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2212	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2213	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2214	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2215	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2216	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2217	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2218	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2219	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2220	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2221	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2222	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2223	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2224	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2225	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2226	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2227	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2228	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2229	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2230	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2231	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2232	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2233	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2234	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2235	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2236	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-28

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2237	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2238	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2239	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2240	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2241	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2242	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2243	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2244	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2245	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2246	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2247	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2248	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2249	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2250	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2251	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2252	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2253	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2254	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2255	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2256	Sub-47	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2257	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2258	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2259	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2260	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2261	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2262	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-6

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2263	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-7
2-2264	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-8
2-2265	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-9
2-2266	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-10
2-2267	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-11
2-2268	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-12
2-2269	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-13
2-2270	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-14
2-2271	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-15
2-2272	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-16
2-2273	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-17
2-2274	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-18
2-2275	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-19
2-2276	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-20
2-2277	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-21
2-2278	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-22
2-2279	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-23
2-2280	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-24
2-2281	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-25
2-2282	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-26
2-2283	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-27
2-2284	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-28
2-2285	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-29
2-2286	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-30
2-2287	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-31
2-2288	Sub-81	3,4-diCIPh	CO	Single bond or CH ₂	Sub-32

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2289	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2290	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2291	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2292	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2293	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2294	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2295	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2296	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2297	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2298	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2299	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2300	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2301	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2302	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2303	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2304	Sub-81	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2305	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2306	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2307	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2308	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2309	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2310	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2311	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2312	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2313	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2314	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-10

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2315	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2316	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2317	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2318	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2319	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2320	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2321	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2322	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2323	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2324	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2325	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2326	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2327	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2328	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2329	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2330	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2331	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2332	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2333	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2334	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2335	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2336	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2337	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2338	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2339	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2340	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-68

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2341	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2342	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2343	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2344	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2345	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2346	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2347	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2348	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2349	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2350	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2351	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2352	Sub-48	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2353	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2354	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2355	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2356	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2357	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2358	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2359	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2360	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2361	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2362	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2363	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2364	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2365	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2366	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-14

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2367	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2368	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2369	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2370	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2371	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2372	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2373	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2374	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2375	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2376	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2377	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2378	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2379	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2380	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2381	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2382	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2383	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2384	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2385	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2386	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2387	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2388	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2389	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2390	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2391	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2392	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-72

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2393	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2394	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2395	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2396	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2397	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2398	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2399	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2400	Sub-49	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2401	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2402	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2403	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2404	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2405	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2406	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2407	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2408	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2409	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2410	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2411	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2412	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2413	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2414	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2415	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2416	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2417	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2418	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-18

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2419	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2420	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2421	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2422	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2423	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2424	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2425	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2426	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2427	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2428	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2429	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2430	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2431	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2432	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2433	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2434	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2435	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2436	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2437	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2438	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2439	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2440	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2441	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2442	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2443	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2444	Sub-50	3,4-diClPh	CO	Single bond or CH ₂	Sub-76

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2445	Sub-50	3,4-diCIPh	CO	Single bond or CH ₂	Sub-77
2-2446	Sub-50	3,4-diCIPh	CO	Single bond or CH ₂	Sub-78
2-2447	Sub-50	3,4-diCIPh	CO	Single bond or CH ₂	Sub-79
2-2448	Sub-50	3,4-diCIPh	CO	Single bond or CH ₂	Sub-80
2-2449	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-1
2-2450	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-2
2-2451	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-3
2-2452	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-4
2-2453	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-5
2-2454	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-6
2-2455	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-7
2-2456	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-8
2-2457	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-9
2-2458	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-10
2-2459	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-11
2-2460	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-12
2-2461	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-13
2-2462	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-14
2-2463	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-15
2-2464	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-16
2-2465	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-17
2-2466	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-18
2-2467	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-19
2-2468	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-20
2-2469	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-21
2-2470	Sub-51	3,4-diCIPh	CO	Single bond or CH ₂	Sub-22

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2471	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2472	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2473	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2474	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2475	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2476	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2477	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2478	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2479	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2480	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2481	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2482	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2483	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2484	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2485	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2486	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2487	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2488	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2489	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2490	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2491	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2492	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2493	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2494	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2495	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2496	Sub-51	3,4-diClPh	CO	Single bond or CH ₂	Sub-80

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2497	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2498	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2499	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2500	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2501	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2502	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2503	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2504	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2505	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2506	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2507	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2508	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2509	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2510	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2511	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2512	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2513	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2514	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2515	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2516	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2517	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2518	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2519	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2520	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2521	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2522	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-26

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2523	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2524	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2525	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2526	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2527	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2528	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2529	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2530	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2531	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2532	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2533	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2534	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2535	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2536	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2537	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2538	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2539	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2540	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2541	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2542	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2543	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2544	Sub-52	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2545	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2546	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2547	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2548	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-4

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2549	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2550	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2551	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2552	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2553	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2554	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2555	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2556	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2557	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2558	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2559	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2560	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2561	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2562	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2563	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2564	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2565	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2566	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2567	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2568	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2569	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2570	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2571	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2572	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2573	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2574	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-30

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2575	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2576	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2577	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2578	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2579	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2580	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2581	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2582	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2583	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2584	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2585	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2586	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2587	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2588	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2589	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2590	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2591	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2592	Sub-53	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2593	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2594	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2595	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2596	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2597	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2598	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2599	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2600	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-8

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2601	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2602	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2603	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2604	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2605	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2606	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2607	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2608	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2609	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2610	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2611	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2612	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2613	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2614	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2615	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2616	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2617	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2618	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2619	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2620	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2621	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2622	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2623	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2624	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2625	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2626	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-66

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2627	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2628	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2629	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2630	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2631	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2632	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2633	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2634	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2635	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2636	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2637	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2638	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2639	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2640	Sub-54	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2641	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2642	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2643	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2644	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2645	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2646	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2647	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2648	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2649	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2650	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2651	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2652	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-12

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2653	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2654	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2655	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2656	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2657	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2658	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2659	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2660	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2661	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2662	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2663	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2664	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2665	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2666	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2667	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2668	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2669	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2670	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2671	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2672	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2673	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2674	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2675	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2676	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2677	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2678	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-70

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2679	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2680	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2681	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2682	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2683	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2684	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2685	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2686	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2687	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2688	Sub-55	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2689	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2690	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2691	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2692	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2693	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2694	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2695	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2696	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2697	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2698	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2699	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2700	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2701	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2702	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2703	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2704	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-16

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2705	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2706	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2707	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2708	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2709	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2710	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2711	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2712	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2713	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2714	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2715	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2716	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2717	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2718	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2719	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2720	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2721	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2722	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2723	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2724	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2725	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2726	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2727	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2728	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2729	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2730	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-74

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2731	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2732	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2733	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2734	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2735	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2736	Sub-56	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2737	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2738	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2739	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2740	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2741	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2742	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2743	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2744	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2745	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2746	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2747	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2748	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2749	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2750	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2751	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2752	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2753	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2754	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2755	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2756	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-20

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2757	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2758	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2759	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2760	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2761	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2762	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2763	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2764	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2765	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2766	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2767	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2768	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2769	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2770	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2771	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2772	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2773	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2774	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2775	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2776	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2777	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2778	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2779	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2780	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2781	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2782	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-78

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2783	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2784	Sub-57	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2785	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2786	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2787	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2788	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2789	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2790	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2791	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2792	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2793	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2794	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2795	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2796	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2797	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2798	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2799	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2800	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2801	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2802	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2803	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2804	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2805	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2806	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2807	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2808	Sub-58	3,4-diClPh	CO	Single bond or CH ₂	Sub-24

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2809	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-25
2-2810	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-26
2-2811	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-27
2-2812	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-28
2-2813	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-29
2-2814	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-30
2-2815	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-31
2-2816	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-32
2-2817	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-65
2-2818	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-66
2-2819	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-67
2-2820	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-68
2-2821	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-69
2-2822	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-70
2-2823	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-71
2-2824	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-72
2-2825	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-73
2-2826	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-74
2-2827	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-75
2-2828	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-76
2-2829	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-77
2-2830	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-78
2-2831	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-79
2-2832	Sub-58	3,4-diCIPh	CO	Single bond or CH ₂	Sub-80
2-2833	Sub-59	3,4-diCIPh	CO	Single bond or CH ₂	Sub-1
2-2834	Sub-59	3,4-diCIPh	CO	Single bond or CH ₂	Sub-2

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2835	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2836	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2837	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2838	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2839	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2840	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2841	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2842	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2843	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2844	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2845	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2846	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2847	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2848	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2849	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2850	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2851	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2852	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2853	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2854	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2855	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2856	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2857	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2858	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2859	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2860	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-28

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2861	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2862	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2863	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2864	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2865	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2866	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2867	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2868	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2869	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2870	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2871	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2872	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2873	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2874	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2875	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2876	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2877	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2878	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2879	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2880	Sub-59	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2881	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2882	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2883	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2884	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2885	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2886	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-6

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2887	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-7
2-2888	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-8
2-2889	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-9
2-2890	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-10
2-2891	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-11
2-2892	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-12
2-2893	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-13
2-2894	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-14
2-2895	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-15
2-2896	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-16
2-2897	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-17
2-2898	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-18
2-2899	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-19
2-2900	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-20
2-2901	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-21
2-2902	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-22
2-2903	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-23
2-2904	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-24
2-2905	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-25
2-2906	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-26
2-2907	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-27
2-2908	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-28
2-2909	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-29
2-2910	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-30
2-2911	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-31
2-2912	Sub-82	3,4-diCIPh	CO	Single bond or CH ₂	Sub-32

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2913	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2914	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2915	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2916	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-2917	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2918	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2919	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2920	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2921	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2922	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2923	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2924	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2925	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2926	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2927	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2928	Sub-82	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2929	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2930	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2931	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2932	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2933	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2934	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2935	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2936	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2937	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2938	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-10

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2939	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2940	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2941	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2942	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-2943	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2944	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2945	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2946	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2947	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2948	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2949	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2950	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2951	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-2952	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-2953	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-2954	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-2955	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-2956	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-2957	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-2958	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-2959	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-2960	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-2961	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-2962	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-2963	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-2964	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-68

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2965	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-2966	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-2967	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-2968	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-2969	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-2970	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-2971	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-2972	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-2973	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-2974	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-2975	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-2976	Sub-83	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-2977	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-2978	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-2979	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-2980	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-2981	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-2982	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-2983	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-2984	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-2985	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-2986	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-2987	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-2988	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-2989	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-2990	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-14

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-2991	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-2992	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-2993	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-2994	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-18
2-2995	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-2996	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-2997	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-2998	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-2999	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-3000	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-3001	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-3002	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-3003	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-3004	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-3005	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-3006	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-3007	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-3008	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-3009	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-3010	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-3011	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-3012	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-3013	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-3014	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-3015	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-3016	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-72

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3017	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-3018	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-3019	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-3020	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-76
2-3021	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-3022	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-3023	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-3024	Sub-61	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-3025	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-1
2-3026	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-2
2-3027	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-3
2-3028	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-4
2-3029	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-5
2-3030	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-6
2-3031	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-7
2-3032	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-8
2-3033	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-9
2-3034	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-10
2-3035	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-11
2-3036	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-12
2-3037	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-13
2-3038	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-14
2-3039	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-15
2-3040	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-16
2-3041	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-17
2-3042	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-18

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3043	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-19
2-3044	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-20
2-3045	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-21
2-3046	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-22
2-3047	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-23
2-3048	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-24
2-3049	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-25
2-3050	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-26
2-3051	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-27
2-3052	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-28
2-3053	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-29
2-3054	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-30
2-3055	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-31
2-3056	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-32
2-3057	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-65
2-3058	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-66
2-3059	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-67
2-3060	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-68
2-3061	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-69
2-3062	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-70
2-3063	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-71
2-3064	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-72
2-3065	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-73
2-3066	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-74
2-3067	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-75
2-3068	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-76

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3069	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-77
2-3070	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-78
2-3071	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-79
2-3072	Sub-60	3,4-diClPh	CO	Single bond or CH ₂	Sub-80
2-3073	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3074	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-2
2-3075	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3076	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-4
2-3077	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3078	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-6
2-3079	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-7
2-3080	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-8
2-3081	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-9
2-3082	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-10
2-3083	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-11
2-3084	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-12
2-3085	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3086	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-14
2-3087	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-15
2-3088	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-16
2-3089	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3090	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3091	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3092	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3093	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3094	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-22

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3095	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3096	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3097	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3098	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3099	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3100	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3101	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3102	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3103	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3104	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3105	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3106	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3107	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3108	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3109	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3110	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3111	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3112	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3113	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3114	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-74
2-3115	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3116	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-76
2-3117	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3118	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-78
2-3119	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3120	Sub-33	3,4-diClPh	SO ₂	Single bond	Sub-80

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3121	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-1
2-3122	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-2
2-3123	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-3
2-3124	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-4
2-3125	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-5
2-3126	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-6
2-3127	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-7
2-3128	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-8
2-3129	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-9
2-3130	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-10
2-3131	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-11
2-3132	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-12
2-3133	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-13
2-3134	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-14
2-3135	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-15
2-3136	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-16
2-3137	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-17
2-3138	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-18
2-3139	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-19
2-3140	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-20
2-3141	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-21
2-3142	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-22
2-3143	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-23
2-3144	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-24
2-3145	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-25
2-3146	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-26

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3147	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-27
2-3148	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-28
2-3149	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-29
2-3150	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-30
2-3151	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-31
2-3152	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-32
2-3153	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-65
2-3154	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-66
2-3155	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-67
2-3156	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-68
2-3157	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-69
2-3158	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-70
2-3159	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-71
2-3160	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-72
2-3161	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-73
2-3162	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-74
2-3163	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-75
2-3164	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-76
2-3165	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-77
2-3166	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-78
2-3167	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-79
2-3168	Sub-34	3,4-diCIPh	SO ₂	Single bond	Sub-80
2-3169	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-1
2-3170	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-2
2-3171	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-3
2-3172	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-4

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3173	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-5
2-3174	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-6
2-3175	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-7
2-3176	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-8
2-3177	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-9
2-3178	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-10
2-3179	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-11
2-3180	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-12
2-3181	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-13
2-3182	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-14
2-3183	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-15
2-3184	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-16
2-3185	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-17
2-3186	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-18
2-3187	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-19
2-3188	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-20
2-3189	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-21
2-3190	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-22
2-3191	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-23
2-3192	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-24
2-3193	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-25
2-3194	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-26
2-3195	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-27
2-3196	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-28
2-3197	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-29
2-3198	Sub-35	3,4-diCIPh	SO ₂	Single bond	Sub-30

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3199	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3200	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3201	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3202	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3203	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3204	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3205	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3206	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3207	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3208	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3209	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3210	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-74
2-3211	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3212	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-76
2-3213	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3214	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-78
2-3215	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3216	Sub-35	3,4-diClPh	SO ₂	Single bond	Sub-80
2-3217	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3218	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-2
2-3219	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3220	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-4
2-3221	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3222	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-6
2-3223	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-7
2-3224	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-8

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3225	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-9
2-3226	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-10
2-3227	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-11
2-3228	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-12
2-3229	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3230	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-14
2-3231	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-15
2-3232	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-16
2-3233	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3234	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3235	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3236	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3237	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3238	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3239	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3240	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3241	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3242	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3243	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3244	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3245	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3246	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3247	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3248	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3249	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3250	Sub-36	3,4-diClPh	SO ₂	Single bond	Sub-66

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3251	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-67
2-3252	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-68
2-3253	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-69
2-3254	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-70
2-3255	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-71
2-3256	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-72
2-3257	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-73
2-3258	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-74
2-3259	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-75
2-3260	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-76
2-3261	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-77
2-3262	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-78
2-3263	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-79
2-3264	Sub-36	3,4-diCIPh	SO ₂	Single bond	Sub-80
2-3265	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-1
2-3266	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-2
2-3267	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-3
2-3268	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-4
2-3269	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-5
2-3270	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-6
2-3271	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-7
2-3272	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-8
2-3273	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-9
2-3274	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-10
2-3275	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-11
2-3276	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-12

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3277	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3278	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-14
2-3279	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-15
2-3280	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-16
2-3281	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3282	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3283	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3284	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3285	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3286	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3287	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3288	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3289	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3290	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3291	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3292	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3293	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3294	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3295	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3296	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3297	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3298	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3299	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3300	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3301	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3302	Sub-37	3,4-diClPh	SO ₂	Single bond	Sub-70

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3303	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-71
2-3304	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-72
2-3305	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-73
2-3306	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-74
2-3307	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-75
2-3308	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-76
2-3309	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-77
2-3310	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-78
2-3311	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-79
2-3312	Sub-37	3,4-diCIPh	SO ₂	Single bond	Sub-80
2-3313	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-1
2-3314	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-2
2-3315	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-3
2-3316	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-4
2-3317	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-5
2-3318	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-6
2-3319	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-7
2-3320	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-8
2-3321	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-9
2-3322	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-10
2-3323	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-11
2-3324	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-12
2-3325	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-13
2-3326	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-14
2-3327	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-15
2-3328	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-16

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3329	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3330	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3331	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3332	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3333	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3334	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3335	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3336	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3337	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3338	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3339	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3340	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3341	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3342	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3343	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3344	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3345	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3346	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3347	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3348	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3349	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3350	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3351	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3352	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3353	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3354	Sub-38	3,4-diClPh	SO ₂	Single bond	Sub-74

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3355	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-75
2-3356	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-76
2-3357	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-77
2-3358	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-78
2-3359	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-79
2-3360	Sub-38	3,4-diCIPh	SO ₂	Single bond	Sub-80
2-3361	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-1
2-3362	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-2
2-3363	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-3
2-3364	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-4
2-3365	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-5
2-3366	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-6
2-3367	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-7
2-3368	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-8
2-3369	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-9
2-3370	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-10
2-3371	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-11
2-3372	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-12
2-3373	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-13
2-3374	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-14
2-3375	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-15
2-3376	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-16
2-3377	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-17
2-3378	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-18
2-3379	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-19
2-3380	Sub-39	3,4-diCIPh	SO ₂	Single bond	Sub-20

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3381	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3382	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3383	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3384	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3385	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3386	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3387	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3388	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3389	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3390	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3391	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3392	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3393	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3394	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3395	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3396	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3397	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3398	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3399	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3400	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3401	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3402	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-74
2-3403	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3404	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-76
2-3405	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3406	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-78

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3407	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3408	Sub-39	3,4-diClPh	SO ₂	Single bond	Sub-80
2-3409	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3410	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-2
2-3411	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3412	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-4
2-3413	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3414	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-6
2-3415	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-7
2-3416	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-8
2-3417	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-9
2-3418	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-10
2-3419	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-11
2-3420	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-12
2-3421	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3422	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-14
2-3423	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-15
2-3424	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-16
2-3425	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3426	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3427	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3428	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3429	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3430	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3431	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3432	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-24

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3433	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3434	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3435	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3436	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3437	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3438	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3439	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3440	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3441	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3442	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3443	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3444	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3445	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3446	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3447	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3448	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3449	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3450	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-74
2-3451	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3452	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-76
2-3453	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3454	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-78
2-3455	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3456	Sub-40	3,4-diClPh	SO ₂	Single bond	Sub-80
2-3457	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3458	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-2

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3459	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3460	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-4
2-3461	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3462	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-6
2-3463	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-7
2-3464	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-8
2-3465	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-9
2-3466	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-10
2-3467	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-11
2-3468	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-12
2-3469	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3470	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-14
2-3471	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-15
2-3472	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-16
2-3473	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3474	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3475	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3476	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3477	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3478	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3479	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3480	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3481	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3482	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3483	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3484	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-28

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3485	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3486	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3487	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3488	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3489	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3490	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3491	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3492	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3493	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3494	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3495	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3496	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3497	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3498	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-74
2-3499	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3500	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-76
2-3501	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3502	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-78
2-3503	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3504	Sub-41	3,4-diClPh	SO ₂	Single bond	Sub-80
2-3505	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3506	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-2
2-3507	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3508	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-4
2-3509	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3510	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-6

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3511	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-7
2-3512	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-8
2-3513	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-9
2-3514	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-10
2-3515	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-11
2-3516	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-12
2-3517	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-13
2-3518	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-14
2-3519	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-15
2-3520	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-16
2-3521	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-17
2-3522	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-18
2-3523	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-19
2-3524	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-20
2-3525	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-21
2-3526	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-22
2-3527	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-23
2-3528	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-24
2-3529	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-25
2-3530	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-26
2-3531	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-27
2-3532	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-28
2-3533	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-29
2-3534	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-30
2-3535	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-31
2-3536	Sub-42	3,4-diCIPh	SO ₂	Single bond	Sub-32

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3537	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3538	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3539	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3540	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3541	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3542	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3543	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3544	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3545	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3546	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-74
2-3547	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3548	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-76
2-3549	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3550	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-78
2-3551	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3552	Sub-42	3,4-diClPh	SO ₂	Single bond	Sub-80
2-3553	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3554	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-2
2-3555	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3556	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-4
2-3557	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3558	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-6
2-3559	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-7
2-3560	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-8
2-3561	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-9
2-3562	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-10

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3563	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-11
2-3564	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-12
2-3565	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3566	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-14
2-3567	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-15
2-3568	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-16
2-3569	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3570	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3571	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3572	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3573	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3574	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3575	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3576	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3577	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3578	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3579	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3580	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3581	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3582	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3583	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3584	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3585	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3586	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3587	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3588	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-68

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3589	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3590	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3591	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3592	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3593	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3594	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-74
2-3595	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3596	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-76
2-3597	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3598	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-78
2-3599	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3600	Sub-43	3,4-diClPh	SO ₂	Single bond	Sub-80
2-3601	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3602	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-2
2-3603	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3604	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-4
2-3605	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3606	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-6
2-3607	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-7
2-3608	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-8
2-3609	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-9
2-3610	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-10
2-3611	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-11
2-3612	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-12
2-3613	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3614	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-14

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3615	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-15
2-3616	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-16
2-3617	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3618	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3619	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3620	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3621	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3622	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3623	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3624	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3625	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3626	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3627	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3628	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3629	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3630	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3631	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3632	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3633	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3634	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3635	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3636	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3637	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3638	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3639	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3640	Sub-44	3,4-diClPh	SO ₂	Single bond	Sub-72

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3641	Sub-44	3,4-diCIPh	SO ₂	Single bond	Sub-73
2-3642	Sub-44	3,4-diCIPh	SO ₂	Single bond	Sub-74
2-3643	Sub-44	3,4-diCIPh	SO ₂	Single bond	Sub-75
2-3644	Sub-44	3,4-diCIPh	SO ₂	Single bond	Sub-76
2-3645	Sub-44	3,4-diCIPh	SO ₂	Single bond	Sub-77
2-3646	Sub-44	3,4-diCIPh	SO ₂	Single bond	Sub-78
2-3647	Sub-44	3,4-diCIPh	SO ₂	Single bond	Sub-79
2-3648	Sub-44	3,4-diCIPh	SO ₂	Single bond	Sub-80
2-3649	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-1
2-3650	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-2
2-3651	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-3
2-3652	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-4
2-3653	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-5
2-3654	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-6
2-3655	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-7
2-3656	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-8
2-3657	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-9
2-3658	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-10
2-3659	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-11
2-3660	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-12
2-3661	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-13
2-3662	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-14
2-3663	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-15
2-3664	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-16
2-3665	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-17
2-3666	Sub-45	3,4-diCIPh	SO ₂	Single bond	Sub-18

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3667	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3668	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3669	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3670	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3671	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3672	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3673	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3674	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3675	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3676	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3677	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3678	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3679	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3680	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3681	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3682	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3683	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3684	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3685	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3686	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3687	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3688	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3689	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3690	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-74
2-3691	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3692	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-76

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3693	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3694	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-78
2-3695	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3696	Sub-45	3,4-diClPh	SO ₂	Single bond	Sub-80
2-3697	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3698	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-2
2-3699	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3700	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-4
2-3701	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3702	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-6
2-3703	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-7
2-3704	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-8
2-3705	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-9
2-3706	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-10
2-3707	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-11
2-3708	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-12
2-3709	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3710	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-14
2-3711	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-15
2-3712	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-16
2-3713	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3714	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3715	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3716	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3717	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3718	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-22

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3719	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3720	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3721	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3722	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3723	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3724	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3725	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3726	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3727	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3728	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3729	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3730	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3731	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3732	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3733	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3734	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3735	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3736	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3737	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3738	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-74
2-3739	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3740	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-76
2-3741	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3742	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-78
2-3743	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3744	Sub-46	3,4-diClPh	SO ₂	Single bond	Sub-80

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3745	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3746	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-2
2-3747	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3748	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-4
2-3749	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3750	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-6
2-3751	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-7
2-3752	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-8
2-3753	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-9
2-3754	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-10
2-3755	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-11
2-3756	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-12
2-3757	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3758	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-14
2-3759	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-15
2-3760	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-16
2-3761	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3762	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3763	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3764	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3765	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3766	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3767	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3768	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3769	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3770	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-26

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3771	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3772	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3773	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3774	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3775	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3776	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3777	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3778	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3779	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3780	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3781	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3782	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3783	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3784	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3785	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3786	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-74
2-3787	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3788	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-76
2-3789	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3790	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-78
2-3791	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3792	Sub-47	3,4-diClPh	SO ₂	Single bond	Sub-80
2-3793	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3794	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-2
2-3795	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3796	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-4

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3797	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3798	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-6
2-3799	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-7
2-3800	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-8
2-3801	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-9
2-3802	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-10
2-3803	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-11
2-3804	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-12
2-3805	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3806	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-14
2-3807	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-15
2-3808	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-16
2-3809	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3810	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3811	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3812	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3813	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3814	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3815	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3816	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3817	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3818	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3819	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3820	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3821	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3822	Sub-81	3,4-diClPh	SO ₂	Single bond	Sub-30

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3823	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-31
2-3824	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-32
2-3825	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-65
2-3826	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-66
2-3827	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-67
2-3828	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-68
2-3829	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-69
2-3830	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-70
2-3831	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-71
2-3832	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-72
2-3833	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-73
2-3834	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-74
2-3835	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-75
2-3836	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-76
2-3837	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-77
2-3838	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-78
2-3839	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-79
2-3840	Sub-81	3,4-diCIPh	SO ₂	Single bond	Sub-80
2-3841	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-1
2-3842	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-2
2-3843	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-3
2-3844	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-4
2-3845	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-5
2-3846	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-6
2-3847	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-7
2-3848	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-8

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3849	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-9
2-3850	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-10
2-3851	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-11
2-3852	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-12
2-3853	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-13
2-3854	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-14
2-3855	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-15
2-3856	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-16
2-3857	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-17
2-3858	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-18
2-3859	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-19
2-3860	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-20
2-3861	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-21
2-3862	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-22
2-3863	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-23
2-3864	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-24
2-3865	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-25
2-3866	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-26
2-3867	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-27
2-3868	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-28
2-3869	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-29
2-3870	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-30
2-3871	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-31
2-3872	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-32
2-3873	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-65
2-3874	Sub-48	3,4-diCIPh	SO ₂	Single bond	Sub-66

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3875	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3876	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3877	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3878	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3879	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3880	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3881	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3882	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-74
2-3883	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3884	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-76
2-3885	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3886	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-78
2-3887	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3888	Sub-48	3,4-diClPh	SO ₂	Single bond	Sub-80
2-3889	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3890	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-2
2-3891	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3892	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-4
2-3893	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3894	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-6
2-3895	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-7
2-3896	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-8
2-3897	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-9
2-3898	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-10
2-3899	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-11
2-3900	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-12

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3901	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3902	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-14
2-3903	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-15
2-3904	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-16
2-3905	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3906	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3907	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3908	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3909	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3910	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3911	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3912	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3913	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3914	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3915	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3916	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3917	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3918	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3919	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3920	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3921	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3922	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3923	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3924	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3925	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3926	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-70

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3927	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3928	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3929	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3930	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-74
2-3931	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3932	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-76
2-3933	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3934	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-78
2-3935	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3936	Sub-49	3,4-diClPh	SO ₂	Single bond	Sub-80
2-3937	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3938	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-2
2-3939	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3940	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-4
2-3941	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3942	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-6
2-3943	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-7
2-3944	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-8
2-3945	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-9
2-3946	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-10
2-3947	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-11
2-3948	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-12
2-3949	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3950	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-14
2-3951	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-15
2-3952	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-16

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3953	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-17
2-3954	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-18
2-3955	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-19
2-3956	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-20
2-3957	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-21
2-3958	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-22
2-3959	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-23
2-3960	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-24
2-3961	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-25
2-3962	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-26
2-3963	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-27
2-3964	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-28
2-3965	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-29
2-3966	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-30
2-3967	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-31
2-3968	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-32
2-3969	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-65
2-3970	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-66
2-3971	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-67
2-3972	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-68
2-3973	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-69
2-3974	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-70
2-3975	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-71
2-3976	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-72
2-3977	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-73
2-3978	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-74

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-3979	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-75
2-3980	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-76
2-3981	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-77
2-3982	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-78
2-3983	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-79
2-3984	Sub-50	3,4-diClPh	SO ₂	Single bond	Sub-80
2-3985	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-1
2-3986	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-2
2-3987	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-3
2-3988	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-4
2-3989	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-5
2-3990	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-6
2-3991	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-7
2-3992	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-8
2-3993	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-9
2-3994	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-10
2-3995	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-11
2-3996	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-12
2-3997	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-13
2-3998	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-14
2-3999	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-15
2-4000	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-16
2-4001	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-17
2-4002	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-18
2-4003	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-19
2-4004	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-20

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4005	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-21
2-4006	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-22
2-4007	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-23
2-4008	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-24
2-4009	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-25
2-4010	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-26
2-4011	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-27
2-4012	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-28
2-4013	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-29
2-4014	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-30
2-4015	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-31
2-4016	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-32
2-4017	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-65
2-4018	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-66
2-4019	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-67
2-4020	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-68
2-4021	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-69
2-4022	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-70
2-4023	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-71
2-4024	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-72
2-4025	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-73
2-4026	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-74
2-4027	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-75
2-4028	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-76
2-4029	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-77
2-4030	Sub-51	3,4-diCIPh	SO ₂	Single bond	Sub-78

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4031	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-79
2-4032	Sub-51	3,4-diClPh	SO ₂	Single bond	Sub-80
2-4033	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-1
2-4034	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-2
2-4035	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-3
2-4036	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-4
2-4037	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-5
2-4038	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-6
2-4039	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-7
2-4040	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-8
2-4041	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-9
2-4042	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-10
2-4043	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-11
2-4044	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-12
2-4045	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-13
2-4046	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-14
2-4047	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-15
2-4048	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-16
2-4049	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-17
2-4050	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-18
2-4051	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-19
2-4052	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-20
2-4053	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-21
2-4054	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-22
2-4055	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-23
2-4056	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-24

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4057	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-25
2-4058	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-26
2-4059	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-27
2-4060	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-28
2-4061	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-29
2-4062	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-30
2-4063	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-31
2-4064	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-32
2-4065	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-65
2-4066	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-66
2-4067	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-67
2-4068	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-68
2-4069	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-69
2-4070	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-70
2-4071	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-71
2-4072	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-72
2-4073	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-73
2-4074	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-74
2-4075	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-75
2-4076	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-76
2-4077	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-77
2-4078	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-78
2-4079	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-79
2-4080	Sub-52	3,4-diClPh	SO ₂	Single bond	Sub-80
2-4081	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-1
2-4082	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-2

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4083	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-3
2-4084	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-4
2-4085	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-5
2-4086	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-6
2-4087	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-7
2-4088	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-8
2-4089	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-9
2-4090	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-10
2-4091	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-11
2-4092	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-12
2-4093	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-13
2-4094	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-14
2-4095	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-15
2-4096	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-16
2-4097	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-17
2-4098	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-18
2-4099	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-19
2-4100	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-20
2-4101	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-21
2-4102	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-22
2-4103	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-23
2-4104	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-24
2-4105	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-25
2-4106	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-26
2-4107	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-27
2-4108	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-28

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4109	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-29
2-4110	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-30
2-4111	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-31
2-4112	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-32
2-4113	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-65
2-4114	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-66
2-4115	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-67
2-4116	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-68
2-4117	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-69
2-4118	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-70
2-4119	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-71
2-4120	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-72
2-4121	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-73
2-4122	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-74
2-4123	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-75
2-4124	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-76
2-4125	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-77
2-4126	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-78
2-4127	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-79
2-4128	Sub-53	3,4-diClPh	SO ₂	Single bond	Sub-80
2-4129	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-1
2-4130	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-2
2-4131	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-3
2-4132	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-4
2-4133	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-5
2-4134	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-6

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4135	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-7
2-4136	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-8
2-4137	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-9
2-4138	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-10
2-4139	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-11
2-4140	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-12
2-4141	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-13
2-4142	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-14
2-4143	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-15
2-4144	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-16
2-4145	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-17
2-4146	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-18
2-4147	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-19
2-4148	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-20
2-4149	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-21
2-4150	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-22
2-4151	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-23
2-4152	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-24
2-4153	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-25
2-4154	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-26
2-4155	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-27
2-4156	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-28
2-4157	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-29
2-4158	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-30
2-4159	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-31
2-4160	Sub-54	3,4-diClPh	SO ₂	Single bond	Sub-32

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4161	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-65
2-4162	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-66
2-4163	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-67
2-4164	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-68
2-4165	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-69
2-4166	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-70
2-4167	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-71
2-4168	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-72
2-4169	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-73
2-4170	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-74
2-4171	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-75
2-4172	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-76
2-4173	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-77
2-4174	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-78
2-4175	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-79
2-4176	Sub-54	3,4-diCIPh	SO ₂	Single bond	Sub-80
2-4177	Sub-55	3,4-diCIPh	SO ₂	Single bond	Sub-1
2-4178	Sub-55	3,4-diCIPh	SO ₂	Single bond	Sub-2
2-4179	Sub-55	3,4-diCIPh	SO ₂	Single bond	Sub-3
2-4180	Sub-55	3,4-diCIPh	SO ₂	Single bond	Sub-4
2-4181	Sub-55	3,4-diCIPh	SO ₂	Single bond	Sub-5
2-4182	Sub-55	3,4-diCIPh	SO ₂	Single bond	Sub-6
2-4183	Sub-55	3,4-diCIPh	SO ₂	Single bond	Sub-7
2-4184	Sub-55	3,4-diCIPh	SO ₂	Single bond	Sub-8
2-4185	Sub-55	3,4-diCIPh	SO ₂	Single bond	Sub-9
2-4186	Sub-55	3,4-diCIPh	SO ₂	Single bond	Sub-10

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4187	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-11
2-4188	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-12
2-4189	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-13
2-4190	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-14
2-4191	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-15
2-4192	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-16
2-4193	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-17
2-4194	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-18
2-4195	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-19
2-4196	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-20
2-4197	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-21
2-4198	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-22
2-4199	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-23
2-4200	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-24
2-4201	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-25
2-4202	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-26
2-4203	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-27
2-4204	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-28
2-4205	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-29
2-4206	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-30
2-4207	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-31
2-4208	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-32
2-4209	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-65
2-4210	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-66
2-4211	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-67
2-4212	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-68

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4213	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-69
2-4214	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-70
2-4215	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-71
2-4216	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-72
2-4217	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-73
2-4218	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-74
2-4219	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-75
2-4220	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-76
2-4221	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-77
2-4222	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-78
2-4223	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-79
2-4224	Sub-55	3,4-diClPh	SO ₂	Single bond	Sub-80
2-4225	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-1
2-4226	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-2
2-4227	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-3
2-4228	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-4
2-4229	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-5
2-4230	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-6
2-4231	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-7
2-4232	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-8
2-4233	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-9
2-4234	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-10
2-4235	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-11
2-4236	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-12
2-4237	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-13
2-4238	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-14

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4239	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-15
2-4240	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-16
2-4241	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-17
2-4242	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-18
2-4243	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-19
2-4244	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-20
2-4245	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-21
2-4246	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-22
2-4247	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-23
2-4248	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-24
2-4249	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-25
2-4250	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-26
2-4251	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-27
2-4252	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-28
2-4253	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-29
2-4254	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-30
2-4255	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-31
2-4256	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-32
2-4257	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-65
2-4258	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-66
2-4259	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-67
2-4260	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-68
2-4261	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-69
2-4262	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-70
2-4263	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-71
2-4264	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-72

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4265	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-73
2-4266	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-74
2-4267	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-75
2-4268	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-76
2-4269	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-77
2-4270	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-78
2-4271	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-79
2-4272	Sub-56	3,4-diClPh	SO ₂	Single bond	Sub-80
2-4273	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-1
2-4274	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-2
2-4275	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-3
2-4276	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-4
2-4277	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-5
2-4278	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-6
2-4279	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-7
2-4280	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-8
2-4281	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-9
2-4282	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-10
2-4283	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-11
2-4284	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-12
2-4285	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-13
2-4286	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-14
2-4287	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-15
2-4288	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-16
2-4289	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-17
2-4290	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-18

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4291	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-19
2-4292	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-20
2-4293	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-21
2-4294	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-22
2-4295	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-23
2-4296	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-24
2-4297	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-25
2-4298	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-26
2-4299	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-27
2-4300	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-28
2-4301	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-29
2-4302	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-30
2-4303	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-31
2-4304	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-32
2-4305	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-65
2-4306	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-66
2-4307	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-67
2-4308	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-68
2-4309	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-69
2-4310	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-70
2-4311	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-71
2-4312	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-72
2-4313	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-73
2-4314	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-74
2-4315	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-75
2-4316	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-76

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4317	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-77
2-4318	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-78
2-4319	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-79
2-4320	Sub-57	3,4-diClPh	SO ₂	Single bond	Sub-80
2-4321	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-1
2-4322	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-2
2-4323	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-3
2-4324	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-4
2-4325	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-5
2-4326	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-6
2-4327	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-7
2-4328	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-8
2-4329	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-9
2-4330	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-10
2-4331	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-11
2-4332	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-12
2-4333	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-13
2-4334	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-14
2-4335	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-15
2-4336	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-16
2-4337	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-17
2-4338	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-18
2-4339	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-19
2-4340	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-20
2-4341	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-21
2-4342	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-22

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4343	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-23
2-4344	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-24
2-4345	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-25
2-4346	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-26
2-4347	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-27
2-4348	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-28
2-4349	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-29
2-4350	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-30
2-4351	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-31
2-4352	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-32
2-4353	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-65
2-4354	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-66
2-4355	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-67
2-4356	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-68
2-4357	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-69
2-4358	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-70
2-4359	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-71
2-4360	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-72
2-4361	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-73
2-4362	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-74
2-4363	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-75
2-4364	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-76
2-4365	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-77
2-4366	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-78
2-4367	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-79
2-4368	Sub-58	3,4-diClPh	SO ₂	Single bond	Sub-80

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4369	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-1
2-4370	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-2
2-4371	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-3
2-4372	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-4
2-4373	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-5
2-4374	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-6
2-4375	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-7
2-4376	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-8
2-4377	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-9
2-4378	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-10
2-4379	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-11
2-4380	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-12
2-4381	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-13
2-4382	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-14
2-4383	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-15
2-4384	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-16
2-4385	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-17
2-4386	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-18
2-4387	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-19
2-4388	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-20
2-4389	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-21
2-4390	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-22
2-4391	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-23
2-4392	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-24
2-4393	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-25
2-4394	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-26

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4395	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-27
2-4396	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-28
2-4397	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-29
2-4398	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-30
2-4399	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-31
2-4400	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-32
2-4401	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-65
2-4402	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-66
2-4403	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-67
2-4404	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-68
2-4405	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-69
2-4406	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-70
2-4407	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-71
2-4408	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-72
2-4409	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-73
2-4410	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-74
2-4411	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-75
2-4412	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-76
2-4413	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-77
2-4414	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-78
2-4415	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-79
2-4416	Sub-59	3,4-diClPh	SO ₂	Single bond	Sub-80
2-4417	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-1
2-4418	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-2
2-4419	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-3
2-4420	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-4

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4421	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-5
2-4422	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-6
2-4423	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-7
2-4424	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-8
2-4425	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-9
2-4426	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-10
2-4427	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-11
2-4428	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-12
2-4429	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-13
2-4430	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-14
2-4431	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-15
2-4432	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-16
2-4433	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-17
2-4434	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-18
2-4435	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-19
2-4436	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-20
2-4437	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-21
2-4438	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-22
2-4439	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-23
2-4440	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-24
2-4441	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-25
2-4442	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-26
2-4443	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-27
2-4444	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-28
2-4445	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-29
2-4446	Sub-82	3,4-diCIPh	SO ₂	Single bond	Sub-30

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4447	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-31
2-4448	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-32
2-4449	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-65
2-4450	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-66
2-4451	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-67
2-4452	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-68
2-4453	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-69
2-4454	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-70
2-4455	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-71
2-4456	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-72
2-4457	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-73
2-4458	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-74
2-4459	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-75
2-4460	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-76
2-4461	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-77
2-4462	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-78
2-4463	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-79
2-4464	Sub-82	3,4-diClPh	SO ₂	Single bond	Sub-80
2-4465	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-1
2-4466	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-2
2-4467	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-3
2-4468	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-4
2-4469	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-5
2-4470	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-6
2-4471	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-7
2-4472	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-8

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4473	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-9
2-4474	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-10
2-4475	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-11
2-4476	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-12
2-4477	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-13
2-4478	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-14
2-4479	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-15
2-4480	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-16
2-4481	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-17
2-4482	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-18
2-4483	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-19
2-4484	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-20
2-4485	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-21
2-4486	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-22
2-4487	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-23
2-4488	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-24
2-4489	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-25
2-4490	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-26
2-4491	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-27
2-4492	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-28
2-4493	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-29
2-4494	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-30
2-4495	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-31
2-4496	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-32
2-4497	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-65
2-4498	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-66

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4499	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-67
2-4500	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-68
2-4501	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-69
2-4502	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-70
2-4503	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-71
2-4504	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-72
2-4505	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-73
2-4506	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-74
2-4507	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-75
2-4508	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-76
2-4509	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-77
2-4510	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-78
2-4511	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-79
2-4512	Sub-83	3,4-diClPh	SO ₂	Single bond	Sub-80
2-4513	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-1
2-4514	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-2
2-4515	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-3
2-4516	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-4
2-4517	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-5
2-4518	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-6
2-4519	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-7
2-4520	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-8
2-4521	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-9
2-4522	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-10
2-4523	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-11
2-4524	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-12

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4525	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-13
2-4526	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-14
2-4527	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-15
2-4528	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-16
2-4529	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-17
2-4530	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-18
2-4531	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-19
2-4532	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-20
2-4533	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-21
2-4534	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-22
2-4535	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-23
2-4536	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-24
2-4537	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-25
2-4538	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-26
2-4539	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-27
2-4540	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-28
2-4541	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-29
2-4542	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-30
2-4543	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-31
2-4544	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-32
2-4545	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-65
2-4546	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-66
2-4547	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-67
2-4548	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-68
2-4549	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-69
2-4550	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-70

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4551	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-71
2-4552	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-72
2-4553	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-73
2-4554	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-74
2-4555	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-75
2-4556	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-76
2-4557	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-77
2-4558	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-78
2-4559	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-79
2-4560	Sub-61	3,4-diClPh	SO ₂	Single bond	Sub-80
2-4561	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-1
2-4562	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-2
2-4563	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-3
2-4564	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-4
2-4565	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-5
2-4566	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-6
2-4567	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-7
2-4568	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-8
2-4569	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-9
2-4570	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-10
2-4571	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-11
2-4572	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-12
2-4573	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-13
2-4574	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-14
2-4575	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-15
2-4576	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-16

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4577	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-17
2-4578	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-18
2-4579	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-19
2-4580	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-20
2-4581	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-21
2-4582	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-22
2-4583	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-23
2-4584	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-24
2-4585	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-25
2-4586	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-26
2-4587	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-27
2-4588	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-28
2-4589	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-29
2-4590	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-30
2-4591	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-31
2-4592	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-32
2-4593	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-65
2-4594	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-66
2-4595	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-67
2-4596	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-68
2-4597	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-69
2-4598	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-70
2-4599	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-71
2-4600	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-72
2-4601	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-73
2-4602	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-74

Table 2 (cont.)

Cpd. No.	R ¹	R ²	A	B	Z
2-4603	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-75
2-4604	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-76
2-4605	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-77
2-4606	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-78
2-4607	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-79
2-4608	Sub-60	3,4-diClPh	SO ₂	Single bond	Sub-80

Table 3

Cpd. No.	R ¹	R ²	A	B	E
3-1	Sub-33	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-2	Sub-34	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-3	Sub-35	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-4	Sub-36	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-5	Sub-37	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-6	Sub-38	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-7	Sub-39	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-8	Sub-40	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-9	Sub-41	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-10	Sub-42	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-11	Sub-84	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-12	Sub-43	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-13	Sub-44	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-14	Sub-45	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-15	Sub-46	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-16	Sub-47	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-17	Sub-81	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-18	Sub-48	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-19	Sub-49	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-20	Sub-50	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-21	Sub-51	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-22	Sub-52	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-23	Sub-53	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-24	Sub-54	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-25	Sub-56	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-26	Sub-57	3,4-diClPh	-CO-	Single Bond	-CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-27	Sub-58	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-28	Sub-59	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-29	Sub-82	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-30	Sub-83	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-31	Sub-61	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-32	Sub-55	3,4-diClPh	-CO-	Single Bond	-CH ₂ -
3-33	Sub-33	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-34	Sub-34	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-35	Sub-35	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-36	Sub-36	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-37	Sub-37	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-38	Sub-38	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-39	Sub-39	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-40	Sub-40	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-41	Sub-41	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-42	Sub-42	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-43	Sub-84	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-44	Sub-43	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-45	Sub-44	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-46	Sub-45	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-47	Sub-46	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-48	Sub-47	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-49	Sub-81	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-50	Sub-48	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-51	Sub-49	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-52	Sub-50	3,4-diClPh	-CO-	Single Bond	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-53	Sub-51	3,4-diCIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-54	Sub-52	3,4-diCIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-55	Sub-53	3,4-diCIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-56	Sub-54	3,4-diCIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-57	Sub-56	3,4-diCIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-58	Sub-57	3,4-diCIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-59	Sub-58	3,4-diCIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-60	Sub-59	3,4-diCIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-61	Sub-82	3,4-diCIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-62	Sub-83	3,4-diCIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-63	Sub-61	3,4-diCIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-64	Sub-55	3,4-diCIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-65	Sub-33	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-66	Sub-34	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-67	Sub-35	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-68	Sub-36	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-69	Sub-37	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-70	Sub-38	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-71	Sub-39	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-72	Sub-40	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-73	Sub-41	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-74	Sub-42	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-75	Sub-84	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-76	Sub-43	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-77	Sub-44	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-78	Sub-45	3,4-diCIPh	-CO-	Single Bond	-(CH ₂) ₃ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-79	Sub-46	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-80	Sub-47	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-81	Sub-81	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-82	Sub-48	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-83	Sub-49	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-84	Sub-50	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-85	Sub-51	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-86	Sub-52	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-87	Sub-53	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-88	Sub-54	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-89	Sub-56	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-90	Sub-57	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-91	Sub-58	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-92	Sub-59	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-93	Sub-82	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-94	Sub-83	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-95	Sub-61	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-96	Sub-55	3,4-diClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-97	Sub-33	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-98	Sub-34	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-99	Sub-35	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-100	Sub-36	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-101	Sub-37	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-102	Sub-38	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-103	Sub-39	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-104	Sub-40	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-105	Sub-41	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-106	Sub-42	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-107	Sub-84	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-108	Sub-43	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-109	Sub-44	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-110	Sub-45	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-111	Sub-46	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-112	Sub-47	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-113	Sub-81	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-114	Sub-48	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-115	Sub-49	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-116	Sub-50	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-117	Sub-51	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-118	Sub-52	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-119	Sub-53	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-120	Sub-54	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-121	Sub-56	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-122	Sub-57	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-123	Sub-58	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-124	Sub-59	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-125	Sub-82	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-126	Sub-83	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-127	Sub-61	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-128	Sub-55	3,4-diClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-129	Sub-33	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-130	Sub-34	3,4-diClPh	-CO-	Single Bond	-CH ₂ -gPr-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-131	Sub-35	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-132	Sub-36	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-133	Sub-37	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-134	Sub-38	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-135	Sub-39	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-136	Sub-40	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-137	Sub-41	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-138	Sub-42	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-139	Sub-84	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-140	Sub-43	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-141	Sub-44	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-142	Sub-45	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-143	Sub-46	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-144	Sub-47	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-145	Sub-81	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-146	Sub-48	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-147	Sub-49	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-148	Sub-50	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-149	Sub-51	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-150	Sub-52	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-151	Sub-53	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-152	Sub-54	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-153	Sub-56	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-154	Sub-57	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-155	Sub-58	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-156	Sub-59	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-157	Sub-82	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-158	Sub-83	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-159	Sub-61	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-160	Sub-55	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-161	Sub-33	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-162	Sub-34	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-163	Sub-35	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-164	Sub-36	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-165	Sub-37	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-166	Sub-38	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-167	Sub-39	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-168	Sub-40	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-169	Sub-41	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-170	Sub-42	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-171	Sub-84	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-172	Sub-43	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-173	Sub-44	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-174	Sub-45	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-175	Sub-46	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-176	Sub-47	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-177	Sub-81	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-178	Sub-48	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-179	Sub-49	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-180	Sub-50	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-181	Sub-51	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-182	Sub-52	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-183	Sub-53	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-184	Sub-54	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-185	Sub-56	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-186	Sub-57	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-187	Sub-58	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-188	Sub-59	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-189	Sub-82	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-190	Sub-83	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-191	Sub-61	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-192	Sub-55	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-193	Sub-33	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-194	Sub-34	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-195	Sub-35	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-196	Sub-36	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-197	Sub-37	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-198	Sub-38	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-199	Sub-39	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-200	Sub-40	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-201	Sub-41	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-202	Sub-42	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-203	Sub-84	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-204	Sub-43	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-205	Sub-44	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-206	Sub-45	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-207	Sub-46	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-208	Sub-47	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cPn-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-209	Sub-81	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-210	Sub-48	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-211	Sub-49	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-212	Sub-50	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-213	Sub-51	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-214	Sub-52	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-215	Sub-53	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-216	Sub-54	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-217	Sub-56	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-218	Sub-57	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-219	Sub-58	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-220	Sub-59	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-221	Sub-82	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-222	Sub-83	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-223	Sub-61	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-224	Sub-55	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cPn-
3-225	Sub-33	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cHx-
3-226	Sub-34	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cHx-
3-227	Sub-35	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cHx-
3-228	Sub-36	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cHx-
3-229	Sub-37	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cHx-
3-230	Sub-38	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cHx-
3-231	Sub-39	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cHx-
3-232	Sub-40	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cHx-
3-233	Sub-41	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cHx-
3-234	Sub-42	3,4-diCIPh	-CO-	Single Bond	-CH ₂ -cHx-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-235	Sub-84	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-236	Sub-43	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-237	Sub-44	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-238	Sub-45	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-239	Sub-46	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-240	Sub-47	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-241	Sub-81	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-242	Sub-48	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-243	Sub-49	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-244	Sub-50	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-245	Sub-51	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-246	Sub-52	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-247	Sub-53	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-248	Sub-54	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-249	Sub-56	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-250	Sub-57	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-251	Sub-58	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-252	Sub-59	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-253	Sub-82	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-254	Sub-83	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-255	Sub-61	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-256	Sub-55	3,4-diClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-257	Sub-33	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-258	Sub-34	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-259	Sub-35	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-260	Sub-36	4-ClPh	-CO-	Single Bond	-CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-261	Sub-37	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-262	Sub-38	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-263	Sub-39	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-264	Sub-40	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-265	Sub-41	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-266	Sub-42	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-267	Sub-84	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-268	Sub-43	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-269	Sub-44	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-270	Sub-45	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-271	Sub-46	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-272	Sub-47	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-273	Sub-81	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-274	Sub-48	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-275	Sub-49	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-276	Sub-50	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-277	Sub-51	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-278	Sub-52	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-279	Sub-53	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-280	Sub-54	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-281	Sub-56	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-282	Sub-57	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-283	Sub-58	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-284	Sub-59	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-285	Sub-82	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-286	Sub-83	4-ClPh	-CO-	Single Bond	-CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-287	Sub-61	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-288	Sub-55	4-ClPh	-CO-	Single Bond	-CH ₂ -
3-289	Sub-33	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-290	Sub-34	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-291	Sub-35	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-292	Sub-36	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-293	Sub-37	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-294	Sub-38	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-295	Sub-39	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-296	Sub-40	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-297	Sub-41	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-298	Sub-42	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-299	Sub-84	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-300	Sub-43	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-301	Sub-44	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-302	Sub-45	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-303	Sub-46	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-304	Sub-47	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-305	Sub-81	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-306	Sub-48	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-307	Sub-49	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-308	Sub-50	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-309	Sub-51	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-310	Sub-52	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-311	Sub-53	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-312	Sub-54	4-ClPh	-CO-	Single Bond	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-313	Sub-56	4-CIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-314	Sub-57	4-CIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-315	Sub-58	4-CIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-316	Sub-59	4-CIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-317	Sub-82	4-CIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-318	Sub-83	4-CIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-319	Sub-61	4-CIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-320	Sub-55	4-CIPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-321	Sub-33	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-322	Sub-34	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-323	Sub-35	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-324	Sub-36	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-325	Sub-37	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-326	Sub-38	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-327	Sub-39	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-328	Sub-40	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-329	Sub-41	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-330	Sub-42	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-331	Sub-84	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-332	Sub-43	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-333	Sub-44	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-334	Sub-45	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-335	Sub-46	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-336	Sub-47	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-337	Sub-81	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-338	Sub-48	4-CIPh	-CO-	Single Bond	-(CH ₂) ₃ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-339	Sub-49	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-340	Sub-50	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-341	Sub-51	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-342	Sub-52	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-343	Sub-53	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-344	Sub-54	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-345	Sub-56	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-346	Sub-57	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-347	Sub-58	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-348	Sub-59	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-349	Sub-82	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-350	Sub-83	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-351	Sub-61	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-352	Sub-55	4-ClPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-353	Sub-33	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-354	Sub-34	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-355	Sub-35	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-356	Sub-36	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-357	Sub-37	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-358	Sub-38	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-359	Sub-39	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-360	Sub-40	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-361	Sub-41	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-362	Sub-42	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-363	Sub-84	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-364	Sub-43	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-365	Sub-44	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-366	Sub-45	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-367	Sub-46	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-368	Sub-47	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-369	Sub-81	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-370	Sub-48	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-371	Sub-49	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-372	Sub-50	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-373	Sub-51	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-374	Sub-52	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-375	Sub-53	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-376	Sub-54	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-377	Sub-56	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-378	Sub-57	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-379	Sub-58	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-380	Sub-59	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-381	Sub-82	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-382	Sub-83	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-383	Sub-61	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-384	Sub-55	4-ClPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-385	Sub-33	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-386	Sub-34	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-387	Sub-35	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-388	Sub-36	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-389	Sub-37	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-390	Sub-38	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-391	Sub-39	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-392	Sub-40	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-393	Sub-41	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-394	Sub-42	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-395	Sub-84	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-396	Sub-43	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-397	Sub-44	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-398	Sub-45	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-399	Sub-46	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-400	Sub-47	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-401	Sub-81	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-402	Sub-48	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-403	Sub-49	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-404	Sub-50	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-405	Sub-51	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-406	Sub-52	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-407	Sub-53	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-408	Sub-54	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-409	Sub-56	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-410	Sub-57	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-411	Sub-58	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-412	Sub-59	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-413	Sub-82	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-414	Sub-83	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-415	Sub-61	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-
3-416	Sub-55	4-ClPh	-CO-	Single Bond	-CH ₂ -cPr-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-417	Sub-33	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-418	Sub-34	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-419	Sub-35	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-420	Sub-36	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-421	Sub-37	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-422	Sub-38	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-423	Sub-39	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-424	Sub-40	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-425	Sub-41	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-426	Sub-42	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-427	Sub-84	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-428	Sub-43	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-429	Sub-44	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-430	Sub-45	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-431	Sub-46	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-432	Sub-47	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-433	Sub-81	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-434	Sub-48	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-435	Sub-49	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-436	Sub-50	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-437	Sub-51	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-438	Sub-52	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-439	Sub-53	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-440	Sub-54	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-441	Sub-56	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-442	Sub-57	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-443	Sub-58	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-444	Sub-59	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-445	Sub-82	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-446	Sub-83	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-447	Sub-61	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-448	Sub-55	4-ClPh	-CO-	Single Bond	-CH ₂ -cBu-
3-449	Sub-33	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-450	Sub-34	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-451	Sub-35	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-452	Sub-36	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-453	Sub-37	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-454	Sub-38	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-455	Sub-39	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-456	Sub-40	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-457	Sub-41	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-458	Sub-42	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-459	Sub-84	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-460	Sub-43	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-461	Sub-44	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-462	Sub-45	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-463	Sub-46	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-464	Sub-47	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-465	Sub-81	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-466	Sub-48	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-467	Sub-49	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-468	Sub-50	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-469	Sub-51	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-470	Sub-52	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-471	Sub-53	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-472	Sub-54	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-473	Sub-56	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-474	Sub-57	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-475	Sub-58	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-476	Sub-59	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-477	Sub-82	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-478	Sub-83	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-479	Sub-61	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-480	Sub-55	4-ClPh	-CO-	Single Bond	-CH ₂ -cPn-
3-481	Sub-33	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-482	Sub-34	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-483	Sub-35	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-484	Sub-36	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-485	Sub-37	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-486	Sub-38	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-487	Sub-39	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-488	Sub-40	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-489	Sub-41	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-490	Sub-42	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-491	Sub-84	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-492	Sub-43	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-493	Sub-44	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-494	Sub-45	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-495	Sub-46	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-496	Sub-47	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-497	Sub-81	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-498	Sub-48	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-499	Sub-49	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-500	Sub-50	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-501	Sub-51	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-502	Sub-52	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-503	Sub-53	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-504	Sub-54	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-505	Sub-56	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-506	Sub-57	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-507	Sub-58	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-508	Sub-59	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-509	Sub-82	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-510	Sub-83	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-511	Sub-61	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-512	Sub-55	4-ClPh	-CO-	Single Bond	-CH ₂ -cHx-
3-513	Sub-33	4-FPh	-CO-	Single Bond	-CH ₂ -
3-514	Sub-34	4-FPh	-CO-	Single Bond	-CH ₂ -
3-515	Sub-35	4-FPh	-CO-	Single Bond	-CH ₂ -
3-516	Sub-36	4-FPh	-CO-	Single Bond	-CH ₂ -
3-517	Sub-37	4-FPh	-CO-	Single Bond	-CH ₂ -
3-518	Sub-38	4-FPh	-CO-	Single Bond	-CH ₂ -
3-519	Sub-39	4-FPh	-CO-	Single Bond	-CH ₂ -
3-520	Sub-40	4-FPh	-CO-	Single Bond	-CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-521	Sub-41	4-FPh	-CO-	Single Bond	-CH ₂ -
3-522	Sub-42	4-FPh	-CO-	Single Bond	-CH ₂ -
3-523	Sub-84	4-FPh	-CO-	Single Bond	-CH ₂ -
3-524	Sub-43	4-FPh	-CO-	Single Bond	-CH ₂ -
3-525	Sub-44	4-FPh	-CO-	Single Bond	-CH ₂ -
3-526	Sub-45	4-FPh	-CO-	Single Bond	-CH ₂ -
3-527	Sub-46	4-FPh	-CO-	Single Bond	-CH ₂ -
3-528	Sub-47	4-FPh	-CO-	Single Bond	-CH ₂ -
3-529	Sub-81	4-FPh	-CO-	Single Bond	-CH ₂ -
3-530	Sub-48	4-FPh	-CO-	Single Bond	-CH ₂ -
3-531	Sub-49	4-FPh	-CO-	Single Bond	-CH ₂ -
3-532	Sub-50	4-FPh	-CO-	Single Bond	-CH ₂ -
3-533	Sub-51	4-FPh	-CO-	Single Bond	-CH ₂ -
3-534	Sub-52	4-FPh	-CO-	Single Bond	-CH ₂ -
3-535	Sub-53	4-FPh	-CO-	Single Bond	-CH ₂ -
3-536	Sub-54	4-FPh	-CO-	Single Bond	-CH ₂ -
3-537	Sub-56	4-FPh	-CO-	Single Bond	-CH ₂ -
3-538	Sub-57	4-FPh	-CO-	Single Bond	-CH ₂ -
3-539	Sub-58	4-FPh	-CO-	Single Bond	-CH ₂ -
3-540	Sub-59	4-FPh	-CO-	Single Bond	-CH ₂ -
3-541	Sub-82	4-FPh	-CO-	Single Bond	-CH ₂ -
3-542	Sub-83	4-FPh	-CO-	Single Bond	-CH ₂ -
3-543	Sub-61	4-FPh	-CO-	Single Bond	-CH ₂ -
3-544	Sub-55	4-FPh	-CO-	Single Bond	-CH ₂ -
3-545	Sub-33	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-546	Sub-34	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-547	Sub-35	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-548	Sub-36	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-549	Sub-37	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-550	Sub-38	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-551	Sub-39	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-552	Sub-40	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-553	Sub-41	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-554	Sub-42	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-555	Sub-84	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-556	Sub-43	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-557	Sub-44	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-558	Sub-45	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-559	Sub-46	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-560	Sub-47	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-561	Sub-81	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-562	Sub-48	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-563	Sub-49	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-564	Sub-50	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-565	Sub-51	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-566	Sub-52	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-567	Sub-53	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-568	Sub-54	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-569	Sub-56	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-570	Sub-57	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-571	Sub-58	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-572	Sub-59	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-573	Sub-82	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-574	Sub-83	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-575	Sub-61	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-576	Sub-55	4-FPh	-CO-	Single Bond	-CH ₂ CH ₂ -
3-577	Sub-33	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-578	Sub-34	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-579	Sub-35	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-580	Sub-36	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-581	Sub-37	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-582	Sub-38	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-583	Sub-39	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-584	Sub-40	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-585	Sub-41	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-586	Sub-42	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-587	Sub-84	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-588	Sub-43	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-589	Sub-44	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-590	Sub-45	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-591	Sub-46	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-592	Sub-47	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-593	Sub-81	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-594	Sub-48	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-595	Sub-49	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-596	Sub-50	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-597	Sub-51	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-598	Sub-52	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-599	Sub-53	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-600	Sub-54	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-601	Sub-56	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-602	Sub-57	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-603	Sub-58	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-604	Sub-59	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-605	Sub-82	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-606	Sub-83	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-607	Sub-61	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-608	Sub-55	4-FPh	-CO-	Single Bond	-(CH ₂) ₃ -
3-609	Sub-33	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-610	Sub-34	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-611	Sub-35	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-612	Sub-36	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-613	Sub-37	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-614	Sub-38	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-615	Sub-39	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-616	Sub-40	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-617	Sub-41	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-618	Sub-42	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-619	Sub-84	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-620	Sub-43	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-621	Sub-44	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-622	Sub-45	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-623	Sub-46	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-624	Sub-47	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-625	Sub-81	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-626	Sub-48	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-627	Sub-49	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-628	Sub-50	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-629	Sub-51	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-630	Sub-52	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-631	Sub-53	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-632	Sub-54	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-633	Sub-56	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-634	Sub-57	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-635	Sub-58	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-636	Sub-59	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-637	Sub-82	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-638	Sub-83	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-639	Sub-61	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-640	Sub-55	4-FPh	-CO-	Single Bond	-CH ₂ C(Me) ₂ -
3-641	Sub-33	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-642	Sub-34	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-643	Sub-35	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-644	Sub-36	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-645	Sub-37	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-646	Sub-38	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-647	Sub-39	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-648	Sub-40	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-649	Sub-41	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-650	Sub-42	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-651	Sub-84	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-652	Sub-43	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-653	Sub-44	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-654	Sub-45	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-655	Sub-46	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-656	Sub-47	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-657	Sub-81	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-658	Sub-48	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-659	Sub-49	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-660	Sub-50	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-661	Sub-51	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-662	Sub-52	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-663	Sub-53	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-664	Sub-54	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-665	Sub-56	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-666	Sub-57	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-667	Sub-58	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-668	Sub-59	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-669	Sub-82	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-670	Sub-83	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-671	Sub-61	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-672	Sub-55	4-FPh	-CO-	Single Bond	-CH ₂ -cPr-
3-673	Sub-33	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-674	Sub-34	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-675	Sub-35	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-676	Sub-36	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-677	Sub-37	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-678	Sub-38	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-679	Sub-39	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-680	Sub-40	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-681	Sub-41	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-682	Sub-42	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-683	Sub-84	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-684	Sub-43	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-685	Sub-44	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-686	Sub-45	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-687	Sub-46	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-688	Sub-47	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-689	Sub-81	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-690	Sub-48	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-691	Sub-49	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-692	Sub-50	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-693	Sub-51	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-694	Sub-52	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-695	Sub-53	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-696	Sub-54	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-697	Sub-56	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-698	Sub-57	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-699	Sub-58	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-700	Sub-59	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-701	Sub-82	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-702	Sub-83	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-703	Sub-61	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-704	Sub-55	4-FPh	-CO-	Single Bond	-CH ₂ -cBu-
3-705	Sub-33	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-706	Sub-34	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-707	Sub-35	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-708	Sub-36	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-709	Sub-37	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-710	Sub-38	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-711	Sub-39	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-712	Sub-40	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-713	Sub-41	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-714	Sub-42	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-715	Sub-84	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-716	Sub-43	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-717	Sub-44	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-718	Sub-45	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-719	Sub-46	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-720	Sub-47	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-721	Sub-81	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-722	Sub-48	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-723	Sub-49	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-724	Sub-50	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-725	Sub-51	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-726	Sub-52	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-727	Sub-53	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-728	Sub-54	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-729	Sub-56	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-730	Sub-57	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-731	Sub-58	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-732	Sub-59	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-733	Sub-82	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-734	Sub-83	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-735	Sub-61	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-736	Sub-55	4-FPh	-CO-	Single Bond	-CH ₂ -cPn-
3-737	Sub-33	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-738	Sub-34	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-739	Sub-35	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-740	Sub-36	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-741	Sub-37	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-742	Sub-38	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-743	Sub-39	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-744	Sub-40	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-745	Sub-41	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-746	Sub-42	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-747	Sub-84	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-748	Sub-43	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-749	Sub-44	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-750	Sub-45	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-751	Sub-46	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-752	Sub-47	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-753	Sub-81	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-754	Sub-48	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-755	Sub-49	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-756	Sub-50	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-757	Sub-51	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-758	Sub-52	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-759	Sub-53	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-760	Sub-54	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-761	Sub-56	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-762	Sub-57	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-763	Sub-58	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-764	Sub-59	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-765	Sub-82	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-766	Sub-83	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-767	Sub-61	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-768	Sub-55	4-FPh	-CO-	Single Bond	-CH ₂ -cHx-
3-769	Sub-33	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-770	Sub-34	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-771	Sub-35	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-772	Sub-36	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-773	Sub-37	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-774	Sub-38	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-775	Sub-39	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-776	Sub-40	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-777	Sub-41	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-778	Sub-42	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-779	Sub-84	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-780	Sub-43	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-781	Sub-44	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-782	Sub-45	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-783	Sub-46	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-784	Sub-47	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-785	Sub-81	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-786	Sub-48	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-787	Sub-49	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-788	Sub-50	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-789	Sub-51	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-790	Sub-52	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-791	Sub-53	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-792	Sub-54	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-793	Sub-56	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-794	Sub-57	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-795	Sub-58	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-796	Sub-59	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-797	Sub-82	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-798	Sub-83	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-799	Sub-61	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-800	Sub-55	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -
3-801	Sub-33	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-802	Sub-34	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-803	Sub-35	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-804	Sub-36	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-805	Sub-37	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-806	Sub-38	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-807	Sub-39	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-808	Sub-40	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-809	Sub-41	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-810	Sub-42	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-811	Sub-84	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-812	Sub-43	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-813	Sub-44	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-814	Sub-45	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-815	Sub-46	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-816	Sub-47	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-817	Sub-81	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-818	Sub-48	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-819	Sub-49	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-820	Sub-50	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-821	Sub-51	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-822	Sub-52	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-823	Sub-53	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-824	Sub-54	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-825	Sub-56	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-826	Sub-57	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-827	Sub-58	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-828	Sub-59	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-829	Sub-82	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-830	Sub-83	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-831	Sub-61	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-832	Sub-55	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-833	Sub-33	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-834	Sub-34	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-835	Sub-35	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-836	Sub-36	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-837	Sub-37	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-838	Sub-38	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-839	Sub-39	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-840	Sub-40	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-841	Sub-41	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-842	Sub-42	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-843	Sub-84	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-844	Sub-43	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-845	Sub-44	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-846	Sub-45	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-847	Sub-46	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-848	Sub-47	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-849	Sub-81	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-850	Sub-48	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-851	Sub-49	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-852	Sub-50	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-853	Sub-51	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-854	Sub-52	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-855	Sub-53	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-856	Sub-54	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-857	Sub-56	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-858	Sub-57	3,4-diCIPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-859	Sub-58	3,4-diClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-860	Sub-59	3,4-diClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-861	Sub-82	3,4-diClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-862	Sub-83	3,4-diClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-863	Sub-61	3,4-diClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-864	Sub-55	3,4-diClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-865	Sub-33	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-866	Sub-34	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-867	Sub-35	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-868	Sub-36	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-869	Sub-37	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-870	Sub-38	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-871	Sub-39	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-872	Sub-40	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-873	Sub-41	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-874	Sub-42	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-875	Sub-84	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-876	Sub-43	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-877	Sub-44	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-878	Sub-45	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-879	Sub-46	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-880	Sub-47	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-881	Sub-81	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-882	Sub-48	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-883	Sub-49	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-884	Sub-50	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-885	Sub-51	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-886	Sub-52	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-887	Sub-53	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-888	Sub-54	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-889	Sub-56	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-890	Sub-57	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-891	Sub-58	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-892	Sub-59	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-893	Sub-82	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-894	Sub-83	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-895	Sub-61	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-896	Sub-55	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-897	Sub-33	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-898	Sub-34	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-899	Sub-35	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-900	Sub-36	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-901	Sub-37	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-902	Sub-38	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-903	Sub-39	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-904	Sub-40	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-905	Sub-41	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-906	Sub-42	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-907	Sub-84	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-908	Sub-43	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-909	Sub-44	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-910	Sub-45	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-911	Sub-46	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-912	Sub-47	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-913	Sub-81	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-914	Sub-48	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-915	Sub-49	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-916	Sub-50	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-917	Sub-51	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-918	Sub-52	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-919	Sub-53	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-920	Sub-54	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-921	Sub-56	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-922	Sub-57	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-923	Sub-58	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-924	Sub-59	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-925	Sub-82	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-926	Sub-83	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-927	Sub-61	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-928	Sub-55	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-929	Sub-33	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-930	Sub-34	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-931	Sub-35	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-932	Sub-36	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-933	Sub-37	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-934	Sub-38	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-935	Sub-39	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-936	Sub-40	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-937	Sub-41	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-938	Sub-42	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-939	Sub-84	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-940	Sub-43	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-941	Sub-44	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-942	Sub-45	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-943	Sub-46	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-944	Sub-47	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-945	Sub-81	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-946	Sub-48	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-947	Sub-49	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-948	Sub-50	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-949	Sub-51	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-950	Sub-52	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-951	Sub-53	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-952	Sub-54	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-953	Sub-56	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-954	Sub-57	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-955	Sub-58	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-956	Sub-59	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-957	Sub-82	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-958	Sub-83	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-959	Sub-61	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-960	Sub-55	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-961	Sub-33	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-962	Sub-34	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-963	Sub-35	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-964	Sub-36	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-965	Sub-37	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-966	Sub-38	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-967	Sub-39	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-968	Sub-40	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-969	Sub-41	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-970	Sub-42	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-971	Sub-84	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-972	Sub-43	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-973	Sub-44	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-974	Sub-45	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-975	Sub-46	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-976	Sub-47	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-977	Sub-81	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-978	Sub-48	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-979	Sub-49	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-980	Sub-50	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-981	Sub-51	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-982	Sub-52	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-983	Sub-53	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-984	Sub-54	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-985	Sub-56	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-986	Sub-57	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-987	Sub-58	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-988	Sub-59	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-989	Sub-82	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-990	Sub-83	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-991	Sub-61	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-992	Sub-55	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-993	Sub-33	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-994	Sub-34	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-995	Sub-35	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-996	Sub-36	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-997	Sub-37	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-998	Sub-38	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-999	Sub-39	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1000	Sub-40	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1001	Sub-41	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1002	Sub-42	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1003	Sub-84	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1004	Sub-43	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1005	Sub-44	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1006	Sub-45	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1007	Sub-46	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1008	Sub-47	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1009	Sub-81	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1010	Sub-48	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1011	Sub-49	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1012	Sub-50	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1013	Sub-51	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1014	Sub-52	3,4-diClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1015	Sub-53	3,4-diCIPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1016	Sub-54	3,4-diCIPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1017	Sub-56	3,4-diCIPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1018	Sub-57	3,4-diCIPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1019	Sub-58	3,4-diCIPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1020	Sub-59	3,4-diCIPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1021	Sub-82	3,4-diCIPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1022	Sub-83	3,4-diCIPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1023	Sub-61	3,4-diCIPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1024	Sub-55	3,4-diCIPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1025	Sub-33	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1026	Sub-34	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1027	Sub-35	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1028	Sub-36	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1029	Sub-37	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1030	Sub-38	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1031	Sub-39	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1032	Sub-40	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1033	Sub-41	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1034	Sub-42	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1035	Sub-84	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1036	Sub-43	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1037	Sub-44	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1038	Sub-45	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1039	Sub-46	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -
3-1040	Sub-47	4-CIPh	-CO-	-CH ₂ -	-CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1041	Sub-81	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1042	Sub-48	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1043	Sub-49	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1044	Sub-50	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1045	Sub-51	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1046	Sub-52	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1047	Sub-53	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1048	Sub-54	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1049	Sub-56	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1050	Sub-57	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1051	Sub-58	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1052	Sub-59	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1053	Sub-82	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1054	Sub-83	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1055	Sub-61	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1056	Sub-55	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -
3-1057	Sub-33	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1058	Sub-34	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1059	Sub-35	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1060	Sub-36	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1061	Sub-37	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1062	Sub-38	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1063	Sub-39	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1064	Sub-40	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1065	Sub-41	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1066	Sub-42	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1067	Sub-84	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1068	Sub-43	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1069	Sub-44	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1070	Sub-45	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1071	Sub-46	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1072	Sub-47	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1073	Sub-81	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1074	Sub-48	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1075	Sub-49	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1076	Sub-50	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1077	Sub-51	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1078	Sub-52	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1079	Sub-53	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1080	Sub-54	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1081	Sub-56	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1082	Sub-57	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1083	Sub-58	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1084	Sub-59	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1085	Sub-82	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1086	Sub-83	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1087	Sub-61	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1088	Sub-55	4-ClPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1089	Sub-33	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1090	Sub-34	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1091	Sub-35	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1092	Sub-36	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1093	Sub-37	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1094	Sub-38	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1095	Sub-39	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1096	Sub-40	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1097	Sub-41	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1098	Sub-42	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1099	Sub-84	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1100	Sub-43	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1101	Sub-44	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1102	Sub-45	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1103	Sub-46	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1104	Sub-47	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1105	Sub-81	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1106	Sub-48	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1107	Sub-49	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1108	Sub-50	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1109	Sub-51	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1110	Sub-52	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1111	Sub-53	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1112	Sub-54	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1113	Sub-56	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1114	Sub-57	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1115	Sub-58	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1116	Sub-59	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1117	Sub-82	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1118	Sub-83	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1119	Sub-61	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1120	Sub-55	4-ClPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1121	Sub-33	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1122	Sub-34	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1123	Sub-35	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1124	Sub-36	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1125	Sub-37	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1126	Sub-38	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1127	Sub-39	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1128	Sub-40	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1129	Sub-41	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1130	Sub-42	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1131	Sub-84	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1132	Sub-43	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1133	Sub-44	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1134	Sub-45	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1135	Sub-46	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1136	Sub-47	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1137	Sub-81	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1138	Sub-48	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1139	Sub-49	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1140	Sub-50	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1141	Sub-51	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1142	Sub-52	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1143	Sub-53	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1144	Sub-54	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1145	Sub-56	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1146	Sub-57	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1147	Sub-58	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1148	Sub-59	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1149	Sub-82	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1150	Sub-83	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1151	Sub-61	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1152	Sub-55	4-ClPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1153	Sub-33	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1154	Sub-34	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1155	Sub-35	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1156	Sub-36	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1157	Sub-37	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1158	Sub-38	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1159	Sub-39	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1160	Sub-40	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1161	Sub-41	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1162	Sub-42	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1163	Sub-84	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1164	Sub-43	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1165	Sub-44	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1166	Sub-45	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1167	Sub-46	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1168	Sub-47	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1169	Sub-81	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1170	Sub-48	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1171	Sub-49	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1172	Sub-50	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1173	Sub-51	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1174	Sub-52	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1175	Sub-53	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1176	Sub-54	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1177	Sub-56	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1178	Sub-57	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1179	Sub-58	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1180	Sub-59	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1181	Sub-82	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1182	Sub-83	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1183	Sub-61	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1184	Sub-55	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1185	Sub-33	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1186	Sub-34	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1187	Sub-35	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1188	Sub-36	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1189	Sub-37	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1190	Sub-38	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1191	Sub-39	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1192	Sub-40	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1193	Sub-41	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1194	Sub-42	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1195	Sub-84	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1196	Sub-43	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1197	Sub-44	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1198	Sub-45	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1199	Sub-46	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1200	Sub-47	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1201	Sub-81	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1202	Sub-48	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1203	Sub-49	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1204	Sub-50	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1205	Sub-51	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1206	Sub-52	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1207	Sub-53	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1208	Sub-54	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1209	Sub-56	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1210	Sub-57	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1211	Sub-58	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1212	Sub-59	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1213	Sub-82	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1214	Sub-83	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1215	Sub-61	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1216	Sub-55	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1217	Sub-33	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1218	Sub-34	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1219	Sub-35	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1220	Sub-36	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1221	Sub-37	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1222	Sub-38	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1223	Sub-39	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1224	Sub-40	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1225	Sub-41	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1226	Sub-42	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1227	Sub-84	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1228	Sub-43	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1229	Sub-44	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1230	Sub-45	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1231	Sub-46	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1232	Sub-47	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1233	Sub-81	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1234	Sub-48	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1235	Sub-49	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1236	Sub-50	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1237	Sub-51	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1238	Sub-52	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1239	Sub-53	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1240	Sub-54	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1241	Sub-56	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1242	Sub-57	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1243	Sub-58	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1244	Sub-59	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1245	Sub-82	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1246	Sub-83	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1247	Sub-61	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1248	Sub-55	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cPn-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1249	Sub-33	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1250	Sub-34	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1251	Sub-35	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1252	Sub-36	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1253	Sub-37	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1254	Sub-38	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1255	Sub-39	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1256	Sub-40	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1257	Sub-41	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1258	Sub-42	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1259	Sub-84	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1260	Sub-43	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1261	Sub-44	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1262	Sub-45	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1263	Sub-46	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1264	Sub-47	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1265	Sub-81	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1266	Sub-48	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1267	Sub-49	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1268	Sub-50	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1269	Sub-51	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1270	Sub-52	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1271	Sub-53	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1272	Sub-54	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1273	Sub-56	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1274	Sub-57	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1275	Sub-58	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1276	Sub-59	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1277	Sub-82	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1278	Sub-83	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1279	Sub-61	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1280	Sub-55	4-ClPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1281	Sub-33	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1282	Sub-34	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1283	Sub-35	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1284	Sub-36	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1285	Sub-37	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1286	Sub-38	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1287	Sub-39	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1288	Sub-40	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1289	Sub-41	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1290	Sub-42	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1291	Sub-84	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1292	Sub-43	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1293	Sub-44	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1294	Sub-45	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1295	Sub-46	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1296	Sub-47	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1297	Sub-81	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1298	Sub-48	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1299	Sub-49	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1300	Sub-50	4-FPh	-CO-	-CH ₂ -	-CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1301	Sub-51	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1302	Sub-52	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1303	Sub-53	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1304	Sub-54	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1305	Sub-56	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1306	Sub-57	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1307	Sub-58	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1308	Sub-59	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1309	Sub-82	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1310	Sub-83	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1311	Sub-61	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1312	Sub-55	4-FPh	-CO-	-CH ₂ -	-CH ₂ -
3-1313	Sub-33	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1314	Sub-34	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1315	Sub-35	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1316	Sub-36	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1317	Sub-37	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1318	Sub-38	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1319	Sub-39	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1320	Sub-40	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1321	Sub-41	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1322	Sub-42	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1323	Sub-84	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1324	Sub-43	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1325	Sub-44	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1326	Sub-45	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1327	Sub-46	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1328	Sub-47	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1329	Sub-81	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1330	Sub-48	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1331	Sub-49	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1332	Sub-50	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1333	Sub-51	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1334	Sub-52	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1335	Sub-53	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1336	Sub-54	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1337	Sub-56	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1338	Sub-57	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1339	Sub-58	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1340	Sub-59	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1341	Sub-82	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1342	Sub-83	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1343	Sub-61	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1344	Sub-55	4-FPh	-CO-	-CH ₂ -	-CH ₂ CH ₂ -
3-1345	Sub-33	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1346	Sub-34	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1347	Sub-35	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1348	Sub-36	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1349	Sub-37	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1350	Sub-38	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1351	Sub-39	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1352	Sub-40	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1353	Sub-41	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1354	Sub-42	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1355	Sub-84	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1356	Sub-43	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1357	Sub-44	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1358	Sub-45	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1359	Sub-46	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1360	Sub-47	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1361	Sub-81	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1362	Sub-48	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1363	Sub-49	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1364	Sub-50	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1365	Sub-51	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1366	Sub-52	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1367	Sub-53	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1368	Sub-54	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1369	Sub-56	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1370	Sub-57	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1371	Sub-58	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1372	Sub-59	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1373	Sub-82	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1374	Sub-83	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1375	Sub-61	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1376	Sub-55	4-FPh	-CO-	-CH ₂ -	-(CH ₂) ₃ -
3-1377	Sub-33	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1378	Sub-34	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1379	Sub-35	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1380	Sub-36	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1381	Sub-37	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1382	Sub-38	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1383	Sub-39	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1384	Sub-40	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1385	Sub-41	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1386	Sub-42	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1387	Sub-84	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1388	Sub-43	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1389	Sub-44	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1390	Sub-45	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1391	Sub-46	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1392	Sub-47	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1393	Sub-81	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1394	Sub-48	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1395	Sub-49	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1396	Sub-50	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1397	Sub-51	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1398	Sub-52	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1399	Sub-53	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1400	Sub-54	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1401	Sub-56	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1402	Sub-57	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1403	Sub-58	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1404	Sub-59	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1405	Sub-82	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1406	Sub-83	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1407	Sub-61	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1408	Sub-55	4-FPh	-CO-	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1409	Sub-33	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1410	Sub-34	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1411	Sub-35	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1412	Sub-36	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1413	Sub-37	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1414	Sub-38	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1415	Sub-39	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1416	Sub-40	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1417	Sub-41	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1418	Sub-42	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1419	Sub-84	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1420	Sub-43	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1421	Sub-44	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1422	Sub-45	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1423	Sub-46	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1424	Sub-47	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1425	Sub-81	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1426	Sub-48	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1427	Sub-49	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1428	Sub-50	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1429	Sub-51	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1430	Sub-52	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1431	Sub-53	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1432	Sub-54	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1433	Sub-56	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1434	Sub-57	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1435	Sub-58	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1436	Sub-59	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1437	Sub-82	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1438	Sub-83	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1439	Sub-61	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1440	Sub-55	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPr-
3-1441	Sub-33	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1442	Sub-34	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1443	Sub-35	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1444	Sub-36	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1445	Sub-37	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1446	Sub-38	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1447	Sub-39	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1448	Sub-40	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1449	Sub-41	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1450	Sub-42	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1451	Sub-84	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1452	Sub-43	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1453	Sub-44	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1454	Sub-45	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1455	Sub-46	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1456	Sub-47	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1457	Sub-81	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1458	Sub-48	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1459	Sub-49	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1460	Sub-50	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1461	Sub-51	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1462	Sub-52	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1463	Sub-53	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1464	Sub-54	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1465	Sub-56	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1466	Sub-57	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1467	Sub-58	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1468	Sub-59	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1469	Sub-82	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1470	Sub-83	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1471	Sub-61	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1472	Sub-55	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cBu-
3-1473	Sub-33	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1474	Sub-34	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1475	Sub-35	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1476	Sub-36	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1477	Sub-37	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1478	Sub-38	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1479	Sub-39	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1480	Sub-40	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1481	Sub-41	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1482	Sub-42	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1483	Sub-84	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1484	Sub-43	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1485	Sub-44	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1486	Sub-45	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1487	Sub-46	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1488	Sub-47	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1489	Sub-81	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1490	Sub-48	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1491	Sub-49	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1492	Sub-50	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1493	Sub-51	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1494	Sub-52	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1495	Sub-53	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1496	Sub-54	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1497	Sub-56	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1498	Sub-57	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1499	Sub-58	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1500	Sub-59	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1501	Sub-82	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1502	Sub-83	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1503	Sub-61	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1504	Sub-55	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cPn-
3-1505	Sub-33	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1506	Sub-34	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1507	Sub-35	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1508	Sub-36	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1509	Sub-37	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1510	Sub-38	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1511	Sub-39	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1512	Sub-40	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1513	Sub-41	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1514	Sub-42	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1515	Sub-84	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1516	Sub-43	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1517	Sub-44	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1518	Sub-45	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1519	Sub-46	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1520	Sub-47	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1521	Sub-81	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1522	Sub-48	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1523	Sub-49	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1524	Sub-50	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1525	Sub-51	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1526	Sub-52	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1527	Sub-53	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1528	Sub-54	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1529	Sub-56	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1530	Sub-57	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1531	Sub-58	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1532	Sub-59	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1533	Sub-82	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1534	Sub-83	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1535	Sub-61	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1536	Sub-55	4-FPh	-CO-	-CH ₂ -	-CH ₂ -cHx-
3-1537	Sub-33	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1538	Sub-34	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1539	Sub-35	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1540	Sub-36	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1541	Sub-37	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1542	Sub-38	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1543	Sub-39	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1544	Sub-40	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1545	Sub-41	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1546	Sub-42	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1547	Sub-84	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1548	Sub-43	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1549	Sub-44	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1550	Sub-45	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1551	Sub-46	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1552	Sub-47	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1553	Sub-81	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1554	Sub-48	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1555	Sub-49	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1556	Sub-50	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1557	Sub-51	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1558	Sub-52	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1559	Sub-53	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1560	Sub-54	3,4-diCIPh	-CO-	Single Bond	-C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1561	Sub-56	3,4-diClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1562	Sub-57	3,4-diClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1563	Sub-58	3,4-diClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1564	Sub-59	3,4-diClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1565	Sub-82	3,4-diClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1566	Sub-83	3,4-diClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1567	Sub-61	3,4-diClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1568	Sub-55	3,4-diClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1569	Sub-33	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1570	Sub-34	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1571	Sub-35	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1572	Sub-36	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1573	Sub-37	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1574	Sub-38	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1575	Sub-39	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1576	Sub-40	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1577	Sub-41	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1578	Sub-42	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1579	Sub-84	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1580	Sub-43	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1581	Sub-44	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1582	Sub-45	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1583	Sub-46	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1584	Sub-47	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1585	Sub-81	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1586	Sub-48	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1587	Sub-49	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1588	Sub-50	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1589	Sub-51	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1590	Sub-52	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1591	Sub-53	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1592	Sub-54	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1593	Sub-56	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1594	Sub-57	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1595	Sub-58	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1596	Sub-59	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1597	Sub-82	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1598	Sub-83	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1599	Sub-61	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1600	Sub-55	3,4-diClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1601	Sub-33	4-ClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1602	Sub-34	4-ClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1603	Sub-35	4-ClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1604	Sub-36	4-ClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1605	Sub-37	4-ClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1606	Sub-38	4-ClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1607	Sub-39	4-ClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1608	Sub-40	4-ClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1609	Sub-41	4-ClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1610	Sub-42	4-ClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1611	Sub-84	4-ClPh	-CO-	Single Bond	-C(Me) ₂ -
3-1612	Sub-43	4-ClPh	-CO-	Single Bond	-C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1613	Sub-44	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1614	Sub-45	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1615	Sub-46	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1616	Sub-47	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1617	Sub-81	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1618	Sub-48	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1619	Sub-49	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1620	Sub-50	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1621	Sub-51	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1622	Sub-52	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1623	Sub-53	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1624	Sub-54	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1625	Sub-56	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1626	Sub-57	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1627	Sub-58	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1628	Sub-59	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1629	Sub-82	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1630	Sub-83	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1631	Sub-61	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1632	Sub-55	4-CIPh	-CO-	Single Bond	-C(Me) ₂ -
3-1633	Sub-33	4-CIPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1634	Sub-34	4-CIPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1635	Sub-35	4-CIPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1636	Sub-36	4-CIPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1637	Sub-37	4-CIPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1638	Sub-38	4-CIPh	-CO-	-CH ₂ -	-C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1639	Sub-39	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1640	Sub-40	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1641	Sub-41	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1642	Sub-42	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1643	Sub-84	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1644	Sub-43	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1645	Sub-44	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1646	Sub-45	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1647	Sub-46	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1648	Sub-47	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1649	Sub-81	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1650	Sub-48	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1651	Sub-49	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1652	Sub-50	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1653	Sub-51	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1654	Sub-52	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1655	Sub-53	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1656	Sub-54	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1657	Sub-56	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1658	Sub-57	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1659	Sub-58	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1660	Sub-59	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1661	Sub-82	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1662	Sub-83	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1663	Sub-61	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1664	Sub-55	4-ClPh	-CO-	-CH ₂ -	-C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1665	Sub-33	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1666	Sub-34	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1667	Sub-35	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1668	Sub-36	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1669	Sub-37	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1670	Sub-38	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1671	Sub-39	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1672	Sub-40	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1673	Sub-41	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1674	Sub-42	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1675	Sub-84	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1676	Sub-43	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1677	Sub-44	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1678	Sub-45	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1679	Sub-46	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1680	Sub-47	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1681	Sub-81	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1682	Sub-48	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1683	Sub-49	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1684	Sub-50	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1685	Sub-51	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1686	Sub-52	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1687	Sub-53	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1688	Sub-54	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1689	Sub-56	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1690	Sub-57	4-FPh	-CO-	Single Bond	-C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1691	Sub-58	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1692	Sub-59	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1693	Sub-82	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1694	Sub-83	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1695	Sub-61	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1696	Sub-55	4-FPh	-CO-	Single Bond	-C(Me) ₂ -
3-1697	Sub-33	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1698	Sub-34	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1699	Sub-35	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1700	Sub-36	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1701	Sub-37	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1702	Sub-38	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1703	Sub-39	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1704	Sub-40	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1705	Sub-41	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1706	Sub-42	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1707	Sub-84	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1708	Sub-43	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1709	Sub-44	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1710	Sub-45	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1711	Sub-46	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1712	Sub-47	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1713	Sub-81	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1714	Sub-48	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1715	Sub-49	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1716	Sub-50	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1717	Sub-51	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1718	Sub-52	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1719	Sub-53	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1720	Sub-54	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1721	Sub-56	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1722	Sub-57	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1723	Sub-58	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1724	Sub-59	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1725	Sub-82	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1726	Sub-83	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1727	Sub-61	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1728	Sub-55	4-FPh	-CO-	-CH ₂ -	-C(Me) ₂ -
3-1729	Sub-37	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1730	Sub-38	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1731	Sub-39	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1732	Sub-40	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1733	Sub-41	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1734	Sub-42	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1735	Sub-84	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1736	Sub-81	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1737	Sub-48	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1738	Sub-37	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1739	Sub-38	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1740	Sub-39	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1741	Sub-40	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1742	Sub-41	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1743	Sub-42	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1744	Sub-84	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1745	Sub-81	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1746	Sub-48	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1747	Sub-37	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1748	Sub-38	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1749	Sub-39	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1750	Sub-40	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1751	Sub-41	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1752	Sub-42	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1753	Sub-84	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1754	Sub-81	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1755	Sub-48	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -
3-1756	Sub-37	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1757	Sub-38	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1758	Sub-39	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1759	Sub-40	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1760	Sub-41	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1761	Sub-42	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1762	Sub-84	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1763	Sub-81	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1764	Sub-48	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1765	Sub-37	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1766	Sub-38	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1767	Sub-39	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1768	Sub-40	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1769	Sub-41	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1770	Sub-42	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1771	Sub-84	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1772	Sub-81	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1773	Sub-48	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1774	Sub-37	4-FPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1775	Sub-38	4-FPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1776	Sub-39	4-FPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1777	Sub-40	4-FPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1778	Sub-41	4-FPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1779	Sub-42	4-FPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1780	Sub-84	4-FPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1781	Sub-81	4-FPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1782	Sub-48	4-FPh	-CH ₂ -	Single Bond	-CH ₂ CH ₂ -
3-1783	Sub-37	3,4-diClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1784	Sub-38	3,4-diClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1785	Sub-39	3,4-diClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1786	Sub-40	3,4-diClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1787	Sub-41	3,4-diClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1788	Sub-42	3,4-diClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1789	Sub-84	3,4-diClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1790	Sub-81	3,4-diClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1791	Sub-48	3,4-diClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1792	Sub-37	4-ClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1793	Sub-38	4-ClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1794	Sub-39	4-ClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1795	Sub-40	4-ClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1796	Sub-41	4-ClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1797	Sub-42	4-ClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1798	Sub-84	4-ClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1799	Sub-81	4-ClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1800	Sub-48	4-ClPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1801	Sub-37	4-FPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1802	Sub-38	4-FPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1803	Sub-39	4-FPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1804	Sub-40	4-FPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1805	Sub-41	4-FPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1806	Sub-42	4-FPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1807	Sub-84	4-FPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1808	Sub-81	4-FPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1809	Sub-48	4-FPh	-CH ₂ -	Single Bond	-(CH ₂) ₃ -
3-1810	Sub-37	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1811	Sub-38	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1812	Sub-39	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1813	Sub-40	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1814	Sub-41	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1815	Sub-42	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1816	Sub-84	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1817	Sub-81	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1818	Sub-48	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1819	Sub-37	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1820	Sub-38	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1821	Sub-39	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1822	Sub-40	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1823	Sub-41	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1824	Sub-42	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1825	Sub-84	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1826	Sub-81	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1827	Sub-48	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1828	Sub-37	4-FPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1829	Sub-38	4-FPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1830	Sub-39	4-FPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1831	Sub-40	4-FPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1832	Sub-41	4-FPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1833	Sub-42	4-FPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1834	Sub-84	4-FPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1835	Sub-81	4-FPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1836	Sub-48	4-FPh	-CH ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-1837	Sub-37	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1838	Sub-38	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1839	Sub-39	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1840	Sub-40	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1841	Sub-41	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1842	Sub-42	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1843	Sub-84	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1844	Sub-81	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1845	Sub-48	3,4-diClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1846	Sub-37	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1847	Sub-38	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1848	Sub-39	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1849	Sub-40	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1850	Sub-41	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1851	Sub-42	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1852	Sub-84	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1853	Sub-81	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1854	Sub-48	4-ClPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1855	Sub-37	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1856	Sub-38	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1857	Sub-39	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1858	Sub-40	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1859	Sub-41	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1860	Sub-42	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1861	Sub-84	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1862	Sub-81	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1863	Sub-48	4-FPh	-CH ₂ -	Single Bond	-CH ₂ -cPr-
3-1864	Sub-37	3,4-diClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1865	Sub-38	3,4-diClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1866	Sub-39	3,4-diClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1867	Sub-40	3,4-diClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1868	Sub-41	3,4-diClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1869	Sub-42	3,4-diClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1870	Sub-84	3,4-diClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1871	Sub-81	3,4-diClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1872	Sub-48	3,4-diClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1873	Sub-37	4-ClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1874	Sub-38	4-ClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1875	Sub-39	4-ClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1876	Sub-40	4-ClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1877	Sub-41	4-ClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1878	Sub-42	4-ClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1879	Sub-84	4-ClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1880	Sub-81	4-ClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1881	Sub-48	4-ClPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1882	Sub-37	4-FPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1883	Sub-38	4-FPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1884	Sub-39	4-FPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1885	Sub-40	4-FPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1886	Sub-41	4-FPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1887	Sub-42	4-FPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1888	Sub-84	4-FPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1889	Sub-81	4-FPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1890	Sub-48	4-FPh	-CH ₂ -	Single Bond	-C(Me) ₂ -
3-1891	Sub-37	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1892	Sub-38	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1893	Sub-39	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1894	Sub-40	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1895	Sub-41	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1896	Sub-42	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1897	Sub-84	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1898	Sub-81	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1899	Sub-48	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1900	Sub-37	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1901	Sub-38	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1902	Sub-39	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1903	Sub-40	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1904	Sub-41	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1905	Sub-42	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1906	Sub-84	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1907	Sub-81	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1908	Sub-48	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1909	Sub-37	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1910	Sub-38	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1911	Sub-39	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1912	Sub-40	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1913	Sub-41	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1914	Sub-42	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1915	Sub-84	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1916	Sub-81	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1917	Sub-48	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -
3-1918	Sub-37	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1919	Sub-38	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1920	Sub-39	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1921	Sub-40	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1922	Sub-41	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1923	Sub-42	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1924	Sub-84	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1925	Sub-81	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1926	Sub-48	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1927	Sub-37	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1928	Sub-38	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1929	Sub-39	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1930	Sub-40	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1931	Sub-41	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1932	Sub-42	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1933	Sub-84	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1934	Sub-81	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1935	Sub-48	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1936	Sub-37	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1937	Sub-38	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1938	Sub-39	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1939	Sub-40	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1940	Sub-41	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1941	Sub-42	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1942	Sub-84	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1943	Sub-81	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1944	Sub-48	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-1945	Sub-37	3,4-diClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1946	Sub-38	3,4-diClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1947	Sub-39	3,4-diClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1948	Sub-40	3,4-diClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1949	Sub-41	3,4-diClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1950	Sub-42	3,4-diClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1951	Sub-84	3,4-diClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1952	Sub-81	3,4-diClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1953	Sub-48	3,4-diClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1954	Sub-37	4-ClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1955	Sub-38	4-ClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1956	Sub-39	4-ClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1957	Sub-40	4-ClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1958	Sub-41	4-ClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1959	Sub-42	4-ClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1960	Sub-84	4-ClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1961	Sub-81	4-ClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1962	Sub-48	4-ClPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1963	Sub-37	4-FPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1964	Sub-38	4-FPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1965	Sub-39	4-FPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1966	Sub-40	4-FPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1967	Sub-41	4-FPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1968	Sub-42	4-FPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1969	Sub-84	4-FPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1970	Sub-81	4-FPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1971	Sub-48	4-FPh	-CH ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-1972	Sub-37	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1973	Sub-38	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1974	Sub-39	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1975	Sub-40	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1976	Sub-41	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-1977	Sub-42	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1978	Sub-84	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1979	Sub-81	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1980	Sub-48	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1981	Sub-37	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1982	Sub-38	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1983	Sub-39	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1984	Sub-40	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1985	Sub-41	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1986	Sub-42	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1987	Sub-84	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1988	Sub-81	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1989	Sub-48	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1990	Sub-37	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1991	Sub-38	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1992	Sub-39	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1993	Sub-40	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1994	Sub-41	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1995	Sub-42	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1996	Sub-84	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1997	Sub-81	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1998	Sub-48	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-1999	Sub-37	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -iPr-
3-2000	Sub-38	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -iPr-
3-2001	Sub-39	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -iPr-
3-2002	Sub-40	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -iPr-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2003	Sub-41	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2004	Sub-42	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2005	Sub-84	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2006	Sub-81	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2007	Sub-48	3,4-diClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2008	Sub-37	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2009	Sub-38	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2010	Sub-39	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2011	Sub-40	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2012	Sub-41	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2013	Sub-42	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2014	Sub-84	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2015	Sub-81	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2016	Sub-48	4-ClPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2017	Sub-37	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2018	Sub-38	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2019	Sub-39	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2020	Sub-40	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2021	Sub-41	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2022	Sub-42	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2023	Sub-84	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2024	Sub-81	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2025	Sub-48	4-FPh	-CH ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2026	Sub-37	3,4-diClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2027	Sub-38	3,4-diClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2028	Sub-39	3,4-diClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2029	Sub-40	3,4-diClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2030	Sub-41	3,4-diClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2031	Sub-42	3,4-diClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2032	Sub-84	3,4-diClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2033	Sub-81	3,4-diClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2034	Sub-48	3,4-diClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2035	Sub-37	4-ClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2036	Sub-38	4-ClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2037	Sub-39	4-ClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2038	Sub-40	4-ClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2039	Sub-41	4-ClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2040	Sub-42	4-ClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2041	Sub-84	4-ClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2042	Sub-81	4-ClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2043	Sub-48	4-ClPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2044	Sub-37	4-FPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2045	Sub-38	4-FPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2046	Sub-39	4-FPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2047	Sub-40	4-FPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2048	Sub-41	4-FPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2049	Sub-42	4-FPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2050	Sub-84	4-FPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2051	Sub-81	4-FPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2052	Sub-48	4-FPh	-CH ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2053	Sub-37	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2054	Sub-38	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2055	Sub-39	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2056	Sub-40	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2057	Sub-41	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2058	Sub-42	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2059	Sub-84	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2060	Sub-81	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2061	Sub-48	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2062	Sub-37	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2063	Sub-38	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2064	Sub-39	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2065	Sub-40	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2066	Sub-41	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2067	Sub-42	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2068	Sub-84	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2069	Sub-81	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2070	Sub-48	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2071	Sub-37	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2072	Sub-38	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2073	Sub-39	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2074	Sub-40	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2075	Sub-41	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2076	Sub-42	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2077	Sub-84	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2078	Sub-81	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2079	Sub-48	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -
3-2080	Sub-37	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2081	Sub-38	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2082	Sub-39	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2083	Sub-40	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2084	Sub-41	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2085	Sub-42	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2086	Sub-84	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2087	Sub-81	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2088	Sub-48	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2089	Sub-37	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2090	Sub-38	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2091	Sub-39	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2092	Sub-40	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2093	Sub-41	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2094	Sub-42	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2095	Sub-84	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2096	Sub-81	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2097	Sub-48	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2098	Sub-37	4-FPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2099	Sub-38	4-FPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2100	Sub-39	4-FPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2101	Sub-40	4-FPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2102	Sub-41	4-FPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2103	Sub-42	4-FPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2104	Sub-84	4-FPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2105	Sub-81	4-FPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -
3-2106	Sub-48	4-FPh	-SO ₂ -	Single Bond	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2107	Sub-37	3,4-diClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2108	Sub-38	3,4-diClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2109	Sub-39	3,4-diClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2110	Sub-40	3,4-diClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2111	Sub-41	3,4-diClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2112	Sub-42	3,4-diClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2113	Sub-84	3,4-diClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2114	Sub-81	3,4-diClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2115	Sub-48	3,4-diClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2116	Sub-37	4-ClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2117	Sub-38	4-ClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2118	Sub-39	4-ClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2119	Sub-40	4-ClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2120	Sub-41	4-ClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2121	Sub-42	4-ClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2122	Sub-84	4-ClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2123	Sub-81	4-ClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2124	Sub-48	4-ClPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2125	Sub-37	4-FPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2126	Sub-38	4-FPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2127	Sub-39	4-FPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2128	Sub-40	4-FPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2129	Sub-41	4-FPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2130	Sub-42	4-FPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2131	Sub-84	4-FPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2132	Sub-81	4-FPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2133	Sub-48	4-FPh	-SO ₂ -	Single Bond	-(CH ₂) ₃ -
3-2134	Sub-37	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2135	Sub-38	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2136	Sub-39	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2137	Sub-40	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2138	Sub-41	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2139	Sub-42	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2140	Sub-84	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2141	Sub-81	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2142	Sub-48	3,4-diCIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-143	Sub-37	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2144	Sub-38	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2145	Sub-39	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2146	Sub-40	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2147	Sub-41	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2148	Sub-42	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2149	Sub-84	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2150	Sub-81	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2151	Sub-48	4-CIPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2152	Sub-37	4-FPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2153	Sub-38	4-FPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2154	Sub-39	4-FPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2155	Sub-40	4-FPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2156	Sub-41	4-FPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2157	Sub-42	4-FPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2158	Sub-84	4-FPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2159	Sub-81	4-FPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2160	Sub-48	4-FPh	-SO ₂ -	Single Bond	-CH ₂ C(Me) ₂ -
3-2161	Sub-37	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2162	Sub-38	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2163	Sub-39	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2164	Sub-40	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2165	Sub-41	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2166	Sub-42	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2167	Sub-84	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2168	Sub-81	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2169	Sub-48	3,4-diClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2170	Sub-37	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2171	Sub-38	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2172	Sub-39	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2173	Sub-40	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2174	Sub-41	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2175	Sub-42	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2176	Sub-84	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2177	Sub-81	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2178	Sub-48	4-ClPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2179	Sub-37	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2180	Sub-38	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2181	Sub-39	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2182	Sub-40	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2183	Sub-41	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2184	Sub-42	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2185	Sub-84	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2186	Sub-81	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2187	Sub-48	4-FPh	-SO ₂ -	Single Bond	-CH ₂ -cPr-
3-2188	Sub-37	3,4-diCIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2189	Sub-38	3,4-diCIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2190	Sub-39	3,4-diCIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2191	Sub-40	3,4-diCIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2192	Sub-41	3,4-diCIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2193	Sub-42	3,4-diCIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2194	Sub-84	3,4-diCIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2195	Sub-81	3,4-diCIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2196	Sub-48	3,4-diCIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2197	Sub-37	4-CIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2198	Sub-38	4-CIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2199	Sub-39	4-CIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2200	Sub-40	4-CIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2201	Sub-41	4-CIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2202	Sub-42	4-CIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2203	Sub-84	4-CIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2204	Sub-81	4-CIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2205	Sub-48	4-CIPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2206	Sub-37	4-FPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2207	Sub-38	4-FPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2208	Sub-39	4-FPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2209	Sub-40	4-FPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2210	Sub-41	4-FPh	-SO ₂ -	Single Bond	-C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2211	Sub-42	4-FPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2212	Sub-84	4-FPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2213	Sub-81	4-FPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2214	Sub-48	4-FPh	-SO ₂ -	Single Bond	-C(Me) ₂ -
3-2215	Sub-37	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2216	Sub-38	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2217	Sub-39	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2218	Sub-40	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2219	Sub-41	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2220	Sub-42	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2221	Sub-84	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2222	Sub-81	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2223	Sub-48	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2224	Sub-37	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2225	Sub-38	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2226	Sub-39	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2227	Sub-40	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2228	Sub-41	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2229	Sub-42	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2230	Sub-84	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2231	Sub-81	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2232	Sub-48	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2233	Sub-37	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2234	Sub-38	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2235	Sub-39	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2236	Sub-40	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2237	Sub-41	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2238	Sub-42	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2239	Sub-84	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2240	Sub-81	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2241	Sub-48	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -
3-2242	Sub-37	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2243	Sub-38	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2244	Sub-39	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2245	Sub-40	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2246	Sub-41	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2247	Sub-42	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2248	Sub-84	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2249	Sub-81	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2250	Sub-48	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2251	Sub-37	4-CIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2252	Sub-38	4-CIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2253	Sub-39	4-CIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2254	Sub-40	4-CIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2255	Sub-41	4-CIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2256	Sub-42	4-CIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2257	Sub-84	4-CIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2258	Sub-81	4-CIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2259	Sub-48	4-CIPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2260	Sub-37	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2261	Sub-38	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2262	Sub-39	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2263	Sub-40	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2264	Sub-41	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2265	Sub-42	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2266	Sub-84	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2267	Sub-81	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2268	Sub-48	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ CH ₂ -
3-2269	Sub-37	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2270	Sub-38	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2271	Sub-39	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2272	Sub-40	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2273	Sub-41	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2274	Sub-42	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2275	Sub-84	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2276	Sub-81	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2277	Sub-48	3,4-diCIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2278	Sub-37	4-CIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2279	Sub-38	4-CIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2280	Sub-39	4-CIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2281	Sub-40	4-CIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2282	Sub-41	4-CIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2283	Sub-42	4-CIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2284	Sub-84	4-CIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2285	Sub-81	4-CIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2286	Sub-48	4-CIPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2287	Sub-37	4-FPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2288	Sub-38	4-FPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2289	Sub-39	4-FPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2290	Sub-40	4-FPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2291	Sub-41	4-FPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2292	Sub-42	4-FPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2293	Sub-84	4-FPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2294	Sub-81	4-FPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2295	Sub-48	4-FPh	-SO ₂ -	-CH ₂ -	-(CH ₂) ₃ -
3-2296	Sub-37	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2297	Sub-38	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2298	Sub-39	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2299	Sub-40	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2300	Sub-41	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2301	Sub-42	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2302	Sub-84	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2303	Sub-81	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2304	Sub-48	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2305	Sub-37	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2306	Sub-38	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2307	Sub-39	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2308	Sub-40	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2309	Sub-41	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2310	Sub-42	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2311	Sub-84	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2312	Sub-81	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2313	Sub-48	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2314	Sub-37	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2315	Sub-38	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2316	Sub-39	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2317	Sub-40	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2318	Sub-41	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2319	Sub-42	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2320	Sub-84	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2321	Sub-81	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2322	Sub-48	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ C(Me) ₂ -
3-2323	Sub-37	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2324	Sub-38	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2325	Sub-39	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2326	Sub-40	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2327	Sub-41	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2328	Sub-42	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2329	Sub-84	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2330	Sub-81	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2331	Sub-48	3,4-diClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2332	Sub-37	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2333	Sub-38	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2334	Sub-39	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2335	Sub-40	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2336	Sub-41	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2337	Sub-42	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2338	Sub-84	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2339	Sub-81	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2340	Sub-48	4-ClPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2341	Sub-37	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2342	Sub-38	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2343	Sub-39	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2344	Sub-40	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2345	Sub-41	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2346	Sub-42	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2347	Sub-84	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2348	Sub-81	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2349	Sub-48	4-FPh	-SO ₂ -	-CH ₂ -	-CH ₂ -cPr-
3-2350	Sub-37	3,4-diClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2351	Sub-38	3,4-diClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2352	Sub-39	3,4-diClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2353	Sub-40	3,4-diClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2354	Sub-41	3,4-diClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2355	Sub-42	3,4-diClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2356	Sub-84	3,4-diClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2357	Sub-81	3,4-diClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2358	Sub-48	3,4-diClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2359	Sub-37	4-ClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2360	Sub-38	4-ClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2361	Sub-39	4-ClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2362	Sub-40	4-ClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2363	Sub-41	4-ClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2364	Sub-42	4-ClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2365	Sub-84	4-ClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2366	Sub-81	4-ClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -

Table 3 (cont.)

Cpd. No.	R ¹	R ²	A	B	E
3-2367	Sub-48	4-ClPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2368	Sub-37	4-FPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2369	Sub-38	4-FPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2370	Sub-39	4-FPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2371	Sub-40	4-FPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2372	Sub-41	4-FPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2373	Sub-42	4-FPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2374	Sub-84	4-FPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2375	Sub-81	4-FPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -
3-2376	Sub-48	4-FPh	-SO ₂ -	-CH ₂ -	-C(Me) ₂ -

Of the compounds listed above, the following are preferred, that is to say Compounds No. 1-1025 to 1-1536, 2-1537 to 2-1728, 2-1825 to 2-1920, 2-1969 to 2-2016, 2-2113 to 2-2160, 2-2257 to 2-2352, 3-1 to 3-64, and 3-97 to 3-160.

More preferred compounds are Compounds No. 1-1089 to 1-1120, 1-1217 to 1-1280, 1-1313 to 1-1344, 1-1505 to 1-1536, 2-1825 to 2-1920, 2-1969 to 2-2016, 2-2257 to 2-2352, 3-5 to 3-11, 3-17, 3-18, 3-37 to 3-43, 3-49, 3-50, 3-101 to 3-107, 3-113, 3-114, 3-133 to 3-139, 3-145 and 3-146.

Still more preferred compounds are Compounds No. 1-1089 to 1-1120, 1-1313 to 1-1344, 2-1969 to 2-2016, 3-7, 3-8, 3-10, 3-11, 3-39, 3-40, 3-42, 3-43, 3-103, 3-104, 3-106, 3-107, 3-135, 3-136, 3-138, and 3-139.

The most preferred compounds of the present invention are as follows:

1-[2-[5-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-phenylpiperidine-4-carboxamide;

1-[2-[5-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-[2-[5-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-(2-pyridyl)piperidine-4-carboxamide;

1-[2-[5-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-(3-pyridyl)piperidine-4-carboxamide;

1-[2-[5-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-(4-pyridyl)piperidine-4-carboxamide;

1-[2-[5-(4-chlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-phenylpiperidine-4-carboxamide;

1-[2-[5-(4-chlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-[2-[5-(4-chlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-(2-pyridyl)piperidine-4-carboxamide;

1-[2-[5-(4-chlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-(3-pyridyl)piperidine-4-carboxamide;

1-{2-[5-(4-chlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(4-pyridyl)piperidine-4-carboxamide;

1-{2-[5-(4-fluorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-phenylpiperidine-4-carboxamide;

1-{2-[5-(4-fluorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-{2-[5-(4-fluorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(2-pyridyl)piperidine-4-carboxamide;

1-{2-[5-(4-fluorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(3-pyridyl)piperidine-4-carboxamide;

1-{2-[5-(4-fluorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(4-pyridyl)piperidine-4-carboxamide;

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-carboxamide;

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenyl-4-(pyrrolidin-1-ylcarbonyl)piperidine;

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-morpholinocarbonyl-4-phenylpiperidine;

1-{2-[2-(4-chlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-carboxamide;

1-{2-[2-(4-chlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-{2-[2-(4-fluorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-carboxamide;

1-{2-[2-(4-fluorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-{2-[2-(3,4-dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-carboxamide;

1-{2-[2-(3,4-dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[isobenzofuran-1(3H),4'-piperidine];

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine];

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide;

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[isoquinoline-1(2H),4'-piperidine]-3(4H)-one;

1-{2-[2-(3,4-dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl}spiro[isobenzofuran-1(3H),4'-piperidine];

1-{2-[2-(3,4-dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine];

1-{2-[2-(3,4-dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide;

1-{2-[2-(3,4-dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl}spiro[isoquinoline-1(2H),4'-piperidin]-3(4H)-one;

1-{2-[(5R)-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(5R)-(4-chlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(5R)-(4-fluorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(4-chlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(4-fluorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)hexahydro-1,4-oxazepin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(4-chlorophenyl)-4-(3,4,5-trimethoxybenzoyl)hexahydro-1,4-oxazepin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(4-fluorophenyl)-4-(3,4,5-trimethoxybenzoyl)hexahydro-1,4-oxazepin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(3,4-dichlorophenyl)-4-(3-isopropoxyphenylacetyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(4-chlorophenyl)-4-(3-isopropoxyphenylacetyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

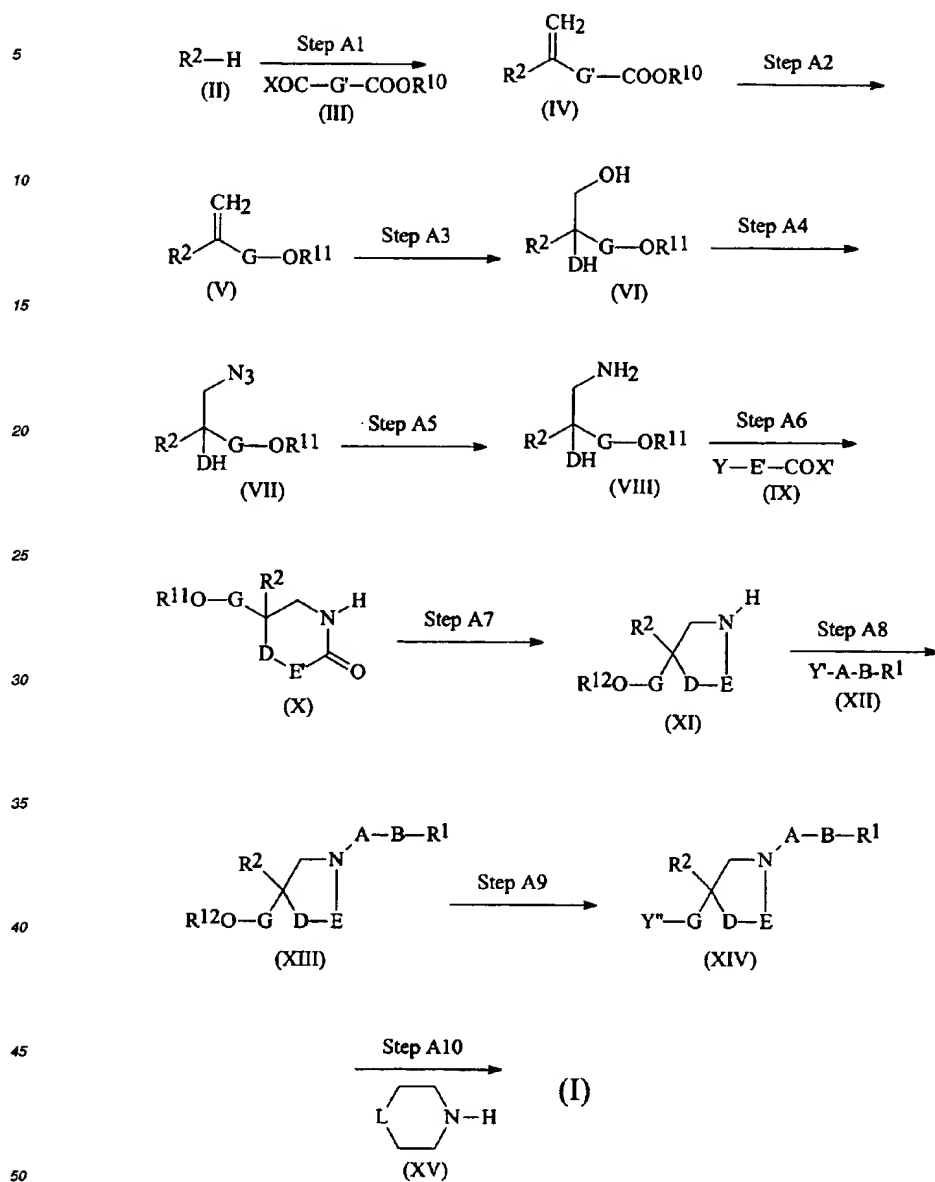
1-{2-[(2R)-(4-fluorophenyl)-4-(3-isopropoxyphenylacetyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide; and

1-{2-[(2R)-(3,4-dichlorophenyl)-5,5-dimethyl-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

and salts and esters, especially pharmaceutically acceptable salts and esters, thereof.

The compounds of the present invention may be prepared by a variety of processes well known for the preparation of compounds of this type, for example as illustrated by the following Reaction Schemes A to J.

Reaction Scheme A:



In the above formulae:

R^1 , R^2 , A, B, D, E, G and L are as defined above;

X, X', Y, Y' and Y'' may be any group or atom which is capable of being eliminated as a nucleophilic residue and are not specifically limited. Preferred examples of such groups and atoms include: halogen atoms, such as the chlorine, bromine and iodine atoms; trihalomethoxy groups, such as the trichloromethoxy group; alkanesulphony-

loxy groups having from 1 to 6 carbon atoms, such as the methanesulphonyloxy and ethanesulphonyloxy groups; haloalkanesulphonyloxy groups having from 1 to 6 carbon atoms, such as the trifluoromethanesulphonyloxy and pentafluoroethanesulphonyloxy groups; and arylsulphonyloxy groups, such as the benzenesulphonyloxy, p-toluenesulphonyloxy and p-nitrobenzenesulphonyloxy groups. Of these, we prefer the halogen atoms and the alkanesulphonyloxy groups.

X may bond with R¹⁰ to represent a single bond. In this case, the compound of formula (III) becomes an acid anhydride.

E' represents a group corresponding to the group represented by E, but in which the number of carbon atoms is one less than that of the alkylene group having from 1 to 4 carbon atoms or of the cycloalkane-1,1-diylmethyl group or of the cycloalkane-1,1-di(ylmethyl) group.

G' represents a group corresponding to the group represented by G, but in which the number of carbon atoms is one less than that of the alkylene group having from 1 to 4 carbon atoms or of the alkenylene group having from 2 to 4 carbon atoms.

R¹⁰ represents a carboxy-protecting group which can be cleaved by a chemical process, such as hydrogenolysis, hydrolysis, electrolysis, or photolysis. Preferred examples of such protecting groups used in the reaction include:

alkyl groups having from 1 to 6 carbon atoms, such as those exemplified above in relation to R⁵ etc.;

alkenyl groups having from 2 to 6 carbon atoms, such as the vinyl, 1-propenyl, 2-propenyl, 1-methyl-2-propenyl, 1-methyl-1-propenyl, 2-methyl-1-propenyl, 2-methyl-2-propenyl, 2-ethyl-2-propenyl, 1-butenyl, 2-butenyl, 1-methyl-2-butenyl, 1-methyl-1-butenyl, 3-methyl-2-butenyl, 1-ethyl-2-butenyl, 3-butenyl, 1-methyl-3-butenyl, 2-methyl-3-butenyl, 1-ethyl-3-butenyl, 1-pentenyl, 2-pentenyl, 1-methyl-2-pentenyl, 2-methyl-2-pentenyl, 3-pentenyl, 1-methyl-3-pentenyl, 2-methyl-3-pentenyl, 4-pentenyl, 1-methyl-4-pentenyl, 2-methyl-4-pentenyl, 1-hexenyl, 2-hexenyl, 3-hexenyl, 4-hexenyl, and 5-hexenyl groups;

alkynyl groups having from 2 to 6 carbon atoms, such as the ethynyl, 2-propynyl, 1-methyl-2-propynyl, 2-butyryl, 1-methyl-2-butyryl, 1-ethyl-2-butyryl, 3-butyryl, 1-methyl-3-butyryl, 2-methyl-3-butyryl, 1-ethyl-3-butyryl, 2-pentyryl, 1-methyl-2-pentyryl, 4-methyl-2-pentyryl, 3-pentyryl, 1-methyl-3-pentyryl, 2-methyl-3-pentyryl, 4-pentyryl, 1-methyl-4-pentyryl, 2-methyl-4-pentyryl, 2-hexynyl, 3-hexynyl, 4-hexynyl, and 5-hexynyl groups;

haloalkyl groups having from 1 to 6 carbon atoms, such as those exemplified above in relation to substituents α ;

hydroxyalkyl groups, such as the hydroxymethyl, 2-hydroxyethyl, 2,3-dihydroxypropyl, 3-hydroxypropyl, 3,4-dihydroxybutyl, and 4-hydroxybutyl groups;

aliphatic acyl-substituted alkyl groups, such as the acetylmethyl group;

aralkyl groups, such as those exemplified above in relation to R⁵ etc.; and

silyl groups, such as those exemplified above in relation to ester groups.

R¹¹ represents a hydroxy-protecting group which can be cleaved by a chemical process, such as hydrogenolysis, hydrolysis, electrolysis, or photolysis. Preferred examples of such protecting groups include:

acyl groups (including alkanoyl, haloalkanoyl, alkoxyalkanoyl, alkenoyl and alkynoyl groups), such as those exemplified above in relation to R⁵ etc.;

aromatic acyl groups (including halogen-substituted, alkyl-substituted, alkoxy-substituted, nitro-substituted, alkoxycarbonyl-substituted and aryl-substituted aromatic acyl groups), such as those exemplified above in relation to R⁵;

tetrahydropyranyl or tetrahydrothiopyranyl groups, such as those exemplified above in relation to ester groups;

tetrahydrofuranyl or tetrahydrothiofuranyl groups, such as those exemplified above in relation to ester groups;

silyl groups, such as those exemplified above in relation to ester groups

alkoxymethyl groups, such as those exemplified above in relation to ester groups;

5 substituted ethyl groups, such as those exemplified above in relation to ester groups;

aralkyl groups, such as those exemplified above in relation to R⁵ etc.;

10 alkoxycarbonyl groups, such as those exemplified above in relation to substituents α ;

alkenyloxycarbonyl groups, such as those exemplified above in relation to ester groups; and

aralkyloxycarbonyl groups, such as those exemplified above in relation to ester groups.

15 R¹² represents a hydrogen atom or a hydroxy-protecting group, as exemplified above in relation to R¹¹.

Step A1

20 In this Step, a compound of formula (IV) is prepared by reacting a compound of formula (II) according to the Friedel-Crafts reaction with an acid derivative of formula (III) in the presence of a Lewis acid and in a solvent (Step A1a), optionally esterifying the resultant free carboxylic acid with a group of formula R¹⁰ when the acid derivative of formula (III) is an acid anhydride (Step A1b), and then converting a carbonyl group into an exo-methylene group according to the Wittig reaction in a solvent in the presence of a base (Step A1c).

Step A1a

25 There is no particular restriction on the nature of the Lewis acids used in the Friedel-Crafts reaction, and any Lewis acid commonly used in reactions of this type may equally be used here. Examples of such Lewis acids include: tri(C₁ - C₆ alkyl)silyl trifluoromethanesulphonates, such as trimethylsilyl trifluoromethanesulphonate; aluminium salts, such as aluminium chloride; tin salts, such as tin tetrachloride; zinc salts, such as zinc bromide; titanium salts, such as titanium tetrachloride; perchlorates, such as trimethylsilyl perchlorate or triphenylmethyl perchlorate. Of these, we prefer the aluminium salts and the titanium salts, aluminium chloride being particularly preferred.

30 The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; and nitro compounds, such as nitroethane and nitrobenzene. Of these, we particularly prefer the halogenated hydrocarbons.

40 The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -10 to 150°C, more preferably from 0 to 100°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, 45 provided that the reaction is effected under the preferred conditions outlined above, a period of from 30 minutes to 24 hours, more preferably from 1 to 12 hours, will usually suffice.

Step A1b

50 When the esterification of this Step is alkylation, the reaction may be accomplished by any one of the following processes.

Step A1b(i)

55 Alkylation may be accomplished by reacting the resulting carboxylic acid with a compound of formula R¹⁰-X', wherein:

R¹⁰ is as defined above; and

X' represents a group capable of being eliminated as a nucleophilic residue, such as a halogen atom (e.g. a chlorine, bromine or iodine atom); an alkanesulphonyloxy group having from 1 to 6 carbon atoms (e.g. a methanesulphonyloxy or ethanesulphonyloxy group); a haloalkanesulphonyloxy group having from 1 to 6 carbon atoms (e.g. a trifluoromethanesulphonyloxy or pentafluoroethanesulphonyloxy group); or an arylsulphonyloxy group (e.g. a benzenesulphonyloxy, p-toluenesulphonyloxy or p-nitrobenzenesulphonyloxy group).

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane or heptane; aromatic hydrocarbons, such as benzene, toluene or xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene or dichlorobenzene; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane or diethylene glycol dimethyl ether; ketones, such as acetone, methyl ethyl ketone, methyl isobutyl ketone, isophorone or cyclohexanone; nitriles, such as acetonitrile or isobutyronitrile; amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone, N-methylpyrrolidinone and hexamethylphosphoric triamide.

The reaction is also normally and preferably carried out in the presence of a base. There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: alkali metal carbonates, such as sodium carbonate, potassium carbonate and lithium carbonate; alkali metal hydrogencarbonates, such as sodium hydrogencarbonate, potassium hydrogencarbonate and lithium hydrogencarbonate; alkali metal hydrides, such as lithium hydride, sodium hydride, and potassium hydride; alkali metal hydroxides, such as sodium hydroxide, potassium hydroxide, barium hydroxide and lithium hydroxide; alkali metal fluorides, such as lithium fluoride, sodium fluoride, and potassium fluoride; alkali metal alkoxides, such as sodium methoxide, sodium ethoxide, potassium methoxide, potassium ethoxide, potassium t-butoxide and lithium methoxide; alkali metal mercaptans, such as sodium methylmercaptan and sodium ethylmercaptan; organic bases, such as N-methylmorpholine, triethylamine, tributylamine, diisopropylethylamine, dicyclohexylamine, N-methylpiperidine, pyridine, 4-pyrrolidinopyridine, picoline, 4-(N,N-dimethylamino)pyridine, 2,6-di(t-butyl)-4-methylpyridine, quinoline, N,N-dimethylaniline, N,N-diethylaniline, 1,5-diazabicyclo[4.3.0]non-5-ene (DBN), 1,4-diazabicyclo[2.2.2]octane (DABCO), 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU); and organic metal bases, such as butyllithium, lithium diisopropylamide and lithium bis(trimethylsilyl)amide.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 120°C, more preferably from 0 to 80°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 0.5 to 10 hours will usually suffice.

Step A1b(ii)

Alkylation may be accomplished by reacting the resulting carboxylic acid with a compound of formula R^{10} -OH [wherein R^{10} is as defined above], using a condensing agent.

There is no particular restriction on the nature of the condensing agents used, and any condensing agent commonly used in reactions of this type may equally be used here. Examples of such condensing agents include:

(1) a combination of a phosphonate (e.g. diphenylphosphoryl azide or diethyl cyanophosphonate) and one or more of the bases described below;

(2) a carbodiimide (e.g. 1,3-dicyclohexylcarbodiimide, 1,3-diisopropylcarbodiimide or 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide); a combination of one or more of the above carbodiimides and one or more of the bases described below; or a combination of one or more of the above carbodiimides and an N-hydroxy compound (e.g. N-hydroxysuccinimide, 1-hydroxybenzotriazole or N-hydroxy-5-norbornene-2,3-dicarboxyimide);

(3) a combination of a disulphide (e.g. 2,2'-dipyridyl disulphide or 2,2'-dibenzothiazolyl disulphide, etc.) and a phosphine (e.g. triphenylphosphine or tributylphosphine);

(4) a carbonate (e.g. N,N'-disuccinimidyl carbonate, di-2-pyridyl carbonate or S,S'-bis(1-phenyl-1H-tetrazol-5-yl)dithiocarbonate);

(5) a phosphinic chloride (e.g. N,N'-bis(2-oxo-3-oxazolidinyl)phosphinic chloride);

(6) an oxalate [e.g. N,N'-disuccinimidyl oxalate, N,N'-diphthalimide oxalate, N,N'-bis(5-norbornene-2,3-dicarboximidyl)oxalate, 1,1'-bis(benzotriazolyl)oxalate, 1,1'-bis(6-chlorobenzotriazolyl)oxalate or 1,1'-bis(6-trifluoromethylbenzotriazolyl)oxalate];

(7) a combination of one or more of the above phosphines and one or more azodicarboxylates or azodicarboxamides [e.g. diethyl azodicarboxylate, 1,1'-(azodicarbonyl)dipiperidine]; or a combination of one or more of the above phosphines and one or more of the bases described below;

(8) an N-alkyl-5-arylisoxazolium-3'-sulphonate, in which the alkyl part has from 1 to 6 carbon atoms and the aryl part is as defined and exemplified above in relation to R¹ etc. (e.g. N-ethyl-5-phenylisoxazolium-3'-sulphonate);

(9) a diheteroaryldiselenide (e.g. di-2-pyridyldiselenide);

(10) an arylsulphonyltriiazolide in which the aryl part is as defined and exemplified above in relation to R¹ etc. (e.g. *p*-nitrobenzenesulphonyltriiazolide);

(11) a 2-halo-1-alkylpyridinium halide, in which the alkyl part has from 1 to 6 carbon atoms (e.g. 2-chloro-1-methylpyridinium iodide);

(12) an imidazole (e.g. 1,1'-oxalyldiimidazole, or N,N'-carbonyldiimidazole);

(13) a 3-alkyl-2-halogen-benzothiazolium fluoroborate, in which the alkyl part has from 1 to 6 carbon atoms (e.g. 3-ethyl-2-chlorobenzothiazolium fluoroborate);

(14) a 3-alkyl-benzothiazole-2-serone, in which the alkyl part has from 1 to 6 carbon atoms (e.g. 3-methylbenzothiazole-2-serone);

(15) a phosphate (e.g. phenyldichlorophosphate or polyphosphate);

(16) a halosulphonyl isocyanate (e.g. chlorosulphonyl isocyanate);

(17) a halosilane (e.g. trimethylsilyl chloride or triethylsilyl chloride);

(18) a combination of an alkanesulphonyl halide having from 1 to 6 carbon atoms (e.g. methanesulphonyl chloride) and one or more of the bases described below; and

(19) an N,N,N',N'-tetraalkyl haloformamidium chloride, in which each alkyl group has from 1 to 6 carbon atoms (e.g. N,N,N',N'-tetramethylchloroformamidium chloride).

Of these, we prefer the carbodiimides or a combination of a phosphine and an azodicarboxylate or azodicarboxamide.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane and heptane; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone, N-methylpyrrolidinone and hexamethylphosphoric triamide

There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: organic bases, such as N-methylmorpholine, triethylamine, tributylamine, diisopropylethylamine, dicyclohexylamine, N-methylpiperidine, pyridine, 4-pyrrolidinopyridine, picoline, 4-(N,N-dimethylamino)pyridine, 2,6-di(*t*-butyl)-4-methylpyridine, quinoline, N,N-dimethylaniline and N,N-diethylaniline.

If desired, 4-(N,N-dimethylamino)pyridine or 4-pyrrolidinopyridine can be used in a catalytic amount in combination with one or more of the other bases. The efficiency of the reaction may also, if desired, be improved by conducting it in the presence of one or more of the following: dehydrating agents (e.g. molecular sieves), quaternary ammonium salts (e.g. benzyltriethylammonium chloride or tetrabutylammonium chloride), crown ethers (e.g. dibenzo-18-crown-6) and

acid scavengers (e.g. 3,4-dihydro-2H-pyrido[1,2-a]pyrimidin-2-one).

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 80°C, more preferably from 0°C to room temperature. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 3 days, more preferably from 30 minutes to 1 day, will usually suffice.

10 Step A1b(iii)

Introduction of a lower alkyl protecting group by alkylation may be accomplished by reacting the resulting carboxylic acid with a corresponding alcohol (e.g. methanol, ethanol, propanol or butanol).

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: the same alcohols as those of the reagent; aliphatic hydrocarbons, such as hexane or heptane; aromatic hydrocarbons, such as benzene, toluene or xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene or dichlorobenzene; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane or diethylene glycol dimethyl ether; ketones, such as acetone, methyl ethyl ketone, methyl isobutyl ketone, isophorone or cyclohexanone; nitriles, such as acetonitrile or isobutyronitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone, N-methylpyrrolidinone or hexamethylphosphoric triamide. Of these, we particularly prefer the same alcohols as those of the reagent.

The reaction is carried out in the presence of an acid catalyst. There is likewise no particular restriction on the nature of the acid catalysts used, and any acid catalyst commonly used in reactions of this type may equally be used here. Examples of such acid catalysts include: Brønsted acids, such as inorganic acids (e.g. hydrogen chloride, hydrogen bromide, sulphuric acid, perchloric acid or phosphoric acid) and organic acids (e.g. acetic acid, formic acid, oxalic acid, methanesulphonic acid, p-toluenesulphonic acid, trifluoroacetic acid or trifluoromethanesulphonic acid); and Lewis acids (e.g. boron trichloride, boron trifluoride or boron tribromide) or acidic ion-exchange resins.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 0 to 150°C, more preferably from 50 to 100°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 24 hours, more preferably from 30 minutes to 5 hours, will usually suffice.

Step A1c

In the Wittig reaction, there is likewise no particular restriction on the nature of the Wittig reagents used, and any Wittig reagent commonly used in reactions of this type may equally be used here. Examples of such Wittig reagents include: methyltriphenylphosphonium halides, such as methyltriphenylphosphonium bromide and methyltriphenylphosphonium iodide.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; ethers, such as diethyl ether, diisopropyl ether and tetrahydrofuran; nitriles, such as acetonitrile and isobutyronitrile; amides, such as formamide, dimethylformamide, dimethylacetamide and hexamethylphosphoric triamide; and sulphoxides, such as dimethyl sulphoxide and sulfolane. Of these, we particularly prefer the aromatic hydrocarbons, most preferably benzene.

There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: alkali metal carbonates, such as sodium carbonate, potassium carbonate and lithium carbonate; alkali metal hydrogencarbonates, such as sodium hydrogen carbonate, potassium hydrogencarbonate and lithium hydrogencarbonate; alkali metal hydrides, such as lithium hydride, sodium hydride and potassium hydride; alkali metal and alkaline earth metal hydroxides, such as sodium hydroxide, potassium hydroxide, barium hydroxide and lithium hydroxide; alkali metal fluorides, such as sodium fluoride and potassium fluoride; and alkali metal alkoxides, such as sodium methoxide, sodium ethoxide, potassium methoxide, potassium ethoxide, potassium t-butoxide and lithium methoxide. Of these, we particularly prefer the alkali metal

hydrides and alkali metal alkoxides, most preferably the alkali metal alkoxides.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 100°C, more preferably from 0 to 50°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 24 hours, more preferably from 30 minutes to 12 hours, will usually suffice.

10 Step A2

In this Step a compound of formula (V) is prepared by reducing the ester compound of formula (IV) (which may have been prepared as described in Step A1) in a solvent using a reducing agent to convert the ester group into a primary hydroxy group and then protecting this hydroxy group with a group R¹¹.

15 There is no particular restriction on the nature of the reducing agents used, and any reducing agent commonly used in reactions of this type may equally be used here. Examples of such reducing agents include: hydride reagents, such as alkali metal borohydrides (e.g. sodium borohydride or lithium borohydride), aluminium hydride compounds (e.g. lithium aluminium hydride or lithium tri-*t*-butoxyaluminumhydride), sodium tellurium hydride and organic aluminium hydride reducing agents [e.g. diisobutylaluminium hydride or sodium bis(methoxyethoxy)aluminium hydride]. Of these, we particularly prefer the aluminium hydride compounds and organic aluminium hydride reducing agents, most preferably the aluminium hydride compounds.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; and ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether. Of these, we particularly prefer the ethers, most preferably diethyl ether and tetrahydrofuran.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -78 to 50°C, more preferably from -20 to 20°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 5 minutes to 24 hours, more preferably from 10 minutes to 2 hours, will usually suffice.

Introduction of the protecting group R¹¹ may be accomplished by any one of the following processes.

Step A2(i)

40 The protecting group R¹¹ may be introduced by reacting the unprotected compound with a suitable amount, preferably from 1 to 4 equivalents (more preferably from 2 to 3 equivalents) of a compound of formula R¹¹-X" or R¹¹-O-R¹¹ (R¹¹ in the latter compound should be a group of the acyl type) wherein

45 R¹¹ is as defined above, preferably a silyl group, of which, we particularly prefer the *t*-butyldimethylsilyl group;

X" represents any group capable of being eliminated as a nucleophilic residue, for example: a halogen atom, such as a chlorine, bromine or iodine atom; an alkoxycarbonyloxy group having from 1 to 6 carbon atoms in the alkoxy part, such as a methoxycarbonyloxy or ethoxycarbonyloxy group; a haloalkanoyloxy group having from 2 to 6 carbon atoms, such as a chloroacetoxy, dichloroacetoxy, trichloroacetoxy or trifluoroacetoxy group; an alkanesulphonyloxy group having from 1 to 6 carbon atoms, such as a methanesulphonyloxy or ethanesulphonyloxy group; a haloalkanesulphonyloxy group having from 1 to 6 carbon atoms, such as a trifluoromethanesulphonyloxy or pentafluoroethanesulphonyloxy group; an arylsulphonyloxy group in which the aryl part is as defined and exemplified above in relation to R¹ etc., such as a benzenesulphonyloxy, *p*-toluenesulphonyloxy or *p*-nitrobenzenesulphonyloxy group. Of these, we particularly prefer the halogen atoms, the alkanesulphonyloxy groups and the arylsulphonyloxy groups.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents

involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane and heptane; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, *N*-methyl-2-pyrrolidone, *N*-methylpyrrolidinone and hexamethylphosphoric triamide. Of these, we particularly prefer the amides.

The reaction may be carried out in the presence of a base. There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: organic bases such as *N*-methylmorpholine, triethylamine, tributylamine, diisopropylethylamine, dicyclohexylamine, *N*-methylpiperidine, pyridine, 4-pyrrolidinopyridine, picoline, 4-(*N,N*-dimethylamino)pyridine, 2,6-di(*t*-butyl)-4-methylpyridine, imidazole, quinoline, *N,N*-dimethylaniline and *N,N*-diethylaniline. Of these, we particularly prefer triethylamine and 4-(*N,N*-dimethylamino)pyridine.

Furthermore, 4-(*N,N*-dimethylamino)pyridine or 4-pyrrolidinopyridine can be used in a catalytic amount in combination with one or more of the other bases. The efficiency of the reaction may, if desired, be further improved by carrying it out in the presence of one or more of the following: quaternary ammonium salts (e.g. benzyltriethylammonium chloride or tetrabutylammonium chloride) and crown ethers (e.g. dibenzo-18-crown-6).

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 100°C, more preferably from -10 to 50°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 1 day, more preferably from 30 minutes to 10 hours, will usually suffice.

Specific examples of the compound of formula $R^{11}-X$ include: acyl halides, such as aliphatic acyl halides (e.g. acetyl chloride, propionyl chloride, butyryl bromide, valeryl chloride and hexanoyl chloride); alkoxycarbonyl halides having from 1 to 6 carbon atoms in the alkoxy part (e.g. methoxycarbonyl chloride, methoxycarbonyl bromide, ethoxycarbonyl chloride, propoxycarbonyl chloride, butoxycarbonyl chloride and hexyloxycarbonyl chloride); arylcarbonyl halides (e.g. benzoyl chloride, benzoyl bromide and naphthoyl chloride); and silyl halides, such as *t*-butyldimethylsilyl chloride, trimethylsilyl chloride, triethylsilyl chloride, triethylsilyl bromide, triisopropylsilyl chloride, dimethylisopropylsilyl chloride, diethylisopropylsilyl chloride, *t*-butyldiphenylsilyl chloride, diphenylmethylsilyl chloride, triphenylsilyl chloride or corresponding silyl trifluoromethanesulphonates; alkyl halides, such as benzyl chloride and benzyl bromide; carbonyloxyalkyl halides having from 1 to 6 carbon atoms in the alkyl part, such as pivaloyloxymethyl chloride and ethoxycarbonyloxymethyl chloride.

Specific examples of the compound of formula $R^{11}-O-R^{11}$ include aliphatic carboxylic anhydrides, such as acetic anhydride, propionic anhydride, valeric anhydride and hexanoic anhydride. A mixed acid anhydride (e.g. a mixed anhydride of formic acid and acetic acid) can also be used.

Step A2(ii)

The protecting group R^{11} may be introduced by reacting the unprotected compound with a compound of formula $R^{11}-OH$ [wherein R^{11} is one of the groups of the acyl type included in those defined above] in a solvent in the presence of a condensing agent, as exemplified above in relation to Step A1b(ii), and in the presence or absence of a base.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane and heptane; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, *N*-methyl-2-pyrrolidone, *N*-methylpyrrolidinone and hexamethylphosphoric triamide.

The base used in Step A2(ii) may be any of those exemplified above in relation to Step A2(i).

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 80°C, more preferably from 0°C to room temperature. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent

employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 3 days, more preferably from 30 minutes to 1 day, will usually suffice.

Step A2(iii)

The protecting group R¹¹ may be introduced by reacting the unprotected compound with a compound of formula R¹¹-OH [wherein R¹¹ is one of the groups of the acyl type included in those defined above] in a solvent and in the presence of a dialkyl halophosphate (e.g. diethyl chlorophosphate) and a base.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane and heptane; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone, N-methylpyrrolidinone and hexamethylphosphoric triamide.

The base used in Step A2(iii) may be any of those exemplified above in relation to Step A2(i).

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 0°C to the reflux temperature of the solvent used, more preferably from room temperature to 50°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 3 days, more preferably from 30 minutes to 1 day, will usually suffice.

Step A3

In this Step, a compound of formula (VI) is prepared by oxidizing the exo-methylene group of a compound of formula (V) in a solvent using an oxidizing agent to convert the compound into a diol form.

There is likewise no particular restriction on the nature of the oxidizing agents used, and any oxidizing agent commonly used in reactions of this type may equally be used here. Examples of such oxidizing agents include: manganese oxides, such as potassium permanganate and manganese dioxide; ruthenium oxides, such as ruthenium (IV) oxide; selenium compounds, such as selenium dioxide; and osmium compounds, such as osmium tetroxide and potassium osmate dihydrate (K₂OsO₄·2H₂O). We particularly prefer to use a catalytic amount of osmium tetroxide and a reoxidizing agent for osmium compounds. Examples of such reoxidizing agents include: metal ferricyanides, such as potassium ferricyanide (III); oxides of amines, such as 4-methylmorpholine oxide; inorganic oxidizing agents, such as persulphate compounds (e.g. potassium persulphate or sodium persulphate); peroxides, such as t-butyl hydroperoxide; hypochlorite compounds, such as t-butyl hypochlorite; and nitrites, such as methyl nitrite. Of these, we particularly prefer the metal ferricyanides and oxides of amines.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, especially halogenated aliphatic hydrocarbons, such as methylene chloride and chloroform; ethers, such as diethyl ether, tetrahydrofuran, dioxane and dimethoxyethane; amides, such as dimethylformamide, dimethylacetamide and hexamethylphosphoric triamide; sulphoxides, such as dimethyl sulphoxide; alcohols, such as methanol, ethanol, propanol, isopropanol, butanol, isobutanol, t-butanol and isoamyl alcohol; esters, such as ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; dilute acids, such as aqueous sulphuric acid; dilute bases, such as an aqueous solution of sodium hydroxide; water; ketones, such as acetone and methyl ethyl ketone; organic bases, such as pyridine; nitriles, such as acetonitrile; or a mixture of any two or more of the above solvents. Of these, we particularly prefer acetone or a mixture of acetone and water.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 80°C, more preferably from -5 to 50°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 1 to 24 hours, more

preferably from 2 to 12 hours, will usually suffice.

An optically active diol derivative having a specific absolute configuration can be produced by optionally conducting an asymmetric dihydroxylation reaction using a chiral ligand. The asymmetric dihydroxylation reaction can be accomplished, for example, by the process of Sharpless *et al.* (Chemical Review, Vol. 94, page 2483 (1994)).

Examples of the oxidizing agent used for this reaction include from 0.0001 to 0.1 equivalents (more preferably from 0.001 to 0.005 equivalents) of osmium tetroxide. Examples of the chiral ligand include hydroquinidines, such as hydroquinidine 1,4-phthalazinediyl diether ((DHQD)₂-PHAL) and hydroquinidine 2,5-diphenyl-4,6-pyrimidinediyl diether ((DHQD)₂-PYR) (preferably (DHQD)₂-PHAL). Examples of the oxidizing agent for reoxidizing osmium compounds include potassium ferricyanide (III) and potassium carbonate.

Examples of the solvent used include a mixture of water and one or more of the following organic solvents: halogenated hydrocarbons, especially halogenated aliphatic hydrocarbons, such as methylene chloride or chloroform; ethers, such as diethyl ether, tetrahydrofuran, dioxane or dimethoxyethane; amides, such as dimethylformamide, dimethylacetamide or hexamethylphosphoric triamide; sulfoxides, such as dimethyl sulphoxide; alcohols, such as methanol, ethanol, propanol, isopropanol, butanol, isobutanol, t-butanol or isoamyl alcohol; ketones, such as acetone or methyl ethyl ketone; esters, such as ethyl acetate, propyl acetate, butyl acetate or diethyl carbonate; and nitriles, such as acetonitrile, preferably a mixture of water and an alcohol. Of these, we particularly prefer a mixture of water and t-butanol.

A compound of formula (VI) wherein D is a sulphur atom can be produced by converting the exo-methylene group of the compound of formula (V) into thiirane according to a conventional process, followed by ring-opening with a hydroxy ion.

Step A4

In this Step, a compound of formula (VII) is prepared by: (a) converting a primary hydroxy group of a compound of formula (VI) into a group that can be eliminated (this reaction takes place in the presence of a base in the presence or absence of a solvent); and (b) then reacting the resulting compound with an azidation reagent in a solvent in the presence or absence of a catalyst to convert it into an azide group.

The reactions are normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reactions or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, especially halogenated aliphatic hydrocarbons, such as methylene chloride and chloroform; ethers, such as diethyl ether, tetrahydrofuran, dioxane and dimethoxyethane; nitriles, such as acetonitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone, N-methylpyrrolidinone and hexamethylphosphoric triamide; more preferably a halogenated hydrocarbon or an ether in the first stage reaction or an amide in the second stage reaction.

There is no particular restriction on the nature of the bases used in the first stage reaction, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: organic bases such as N-methylmorpholine, triethylamine, tripropylamine, tributylamine, diisopropylethylamine, dicyclohexylamine, N-methylpiperidine, pyridine, 4-pyrrolidinopyridine, picoline, 4-(N,N-dimethylamino)pyridine, 2,6-di(t-butyl)-4-methylpyridine, quinoline, N,N-dimethylaniline, N,N-diethylaniline, 1,5-diazabicyclo[4.3.0]non-5-ene (DBN), 1,4-diazabicyclo[2.2.2]octane (DABCO) and 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU). Of these, we particularly prefer triethylamine, pyridine and 4-(N,N-dimethylamino)pyridine.

The reaction is most preferably accomplished using pyridine as a solvent and adding a catalytic amount of 4-(N,N-dimethylamino)pyridine.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 50°C, more preferably from -10 to 20°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 15 minutes to 24 hours, more preferably from 30 minutes to 6 hours, will usually suffice.

The group capable of being eliminated is the same group as that defined above for X. The reagent for forming the elimination group, is preferably a corresponding halide, and examples of such a reagent include sulphonyl halides, such as methanesulphonyl chloride and p-toluenesulphonyl chloride. The reaction may be conducted in the same manner as that employed to introduce the protecting group R¹¹.

There is likewise no particular restriction on the nature of the azidation reagents used in the second stage reaction, and any azidation reagent commonly used in reactions of this type may equally be used here. Examples of such azidation reagents include: diarylphosphoryl azides, such as diphenylphosphoryl azide; trialkylsilyl azides, such as trimethylsilyl azide and triethylsilyl azide; and alkali metal azides, such as sodium azide, potassium azide and lithium azide. Of

these, we particularly prefer the alkali metal azides.

Examples of the catalyst which may be used include trialkylsilyl triflates, such as trimethylsilyl triflate and triethylsilyl triflate; Lewis acids, such as boron trifluoride etherate, aluminium chloride and zinc chloride.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 20 to 180°C, more preferably from 50 to 150°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 24 hours, more preferably from 30 minutes to 8 hours, will usually suffice.

Step A5

In this Step, an amino compound of formula (VIII) is prepared by reducing the azide group of a compound of formula (VII) in a solvent.

The reduction process may be carried out using any reagent capable of reducing an azide group to form an amino group, and is not specifically limited. Preferably, the reaction is conducted at a temperature of from 20 to 150°C (more preferably from 50 to 100°C) for a period of from 15 minutes to 1 day (more preferably from 1 to 12 hours) in a water-containing solvent (preferably an ether, such as tetrahydrofuran) using triphenylphosphine as the reducing agent.

Alternatively, the reaction may be accomplished by conducting a catalytic hydrogenation reaction at a temperature of from -10 to 100°C (more preferably from 0 to 50°C) for a period of from 1 hour to 4 days (more preferably from 2 hours to 2 days) in an organic solvents, such as an alcohol (e.g. methanol or ethanol), an ester (e.g. ethyl acetate, propyl acetate, butyl acetate or diethyl acetate), an ether (e.g. tetrahydrofuran or dioxane) or a fatty acid (e.g. acetic acid) or a mixture of any one or more of these organic solvent and water (preferably an alcohol) using a catalyst, such as palladium-on-carbon, platinum or Raney nickel.

Step A6

In this Step, a compound of formula (X) is prepared by the acylation reaction of the amino group of a compound of formula (VIII) with a compound of formula (IX) in a solvent in the presence of a base (Step A6a), followed by ring-closing alkylation on a group of formula DH, to form a cyclic amide (Step A6b).

Step A6a

The acylation reaction in this stage is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane and heptane; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, *N*-methyl-2-pyrrolidone, *N*-methylpyrrolidinone and hexamethylphosphoric triamide.

There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: organic bases such as *N*-methylmorpholine, triethylamine, tributylamine, diisopropylethylamine, dicyclohexylamine, *N*-methylpiperidine, pyridine, 4-pyrrolidinopyridine, picoline, 4-(*N,N*-dimethylamino)pyridine, 2,6-di(*t*-butyl)-4-methylpyridine, quinoline, *N,N*-dimethylaniline and *N,N*-diethylaniline.

If desired, 4-(*N,N*-dimethylamino)pyridine or 4-pyrrolidinopyridine can be used in a catalytic amount in combination with one or more of the other bases. The efficiency of the reaction may, if desired, be improved by carrying it out in the presence of one or more of the following: dehydrating agents (e.g. molecular sieves), quaternary ammonium salts (e.g. benzytriethylammonium chloride or tetrabutylammonium chloride), crown ethers (e.g. dibenzo-18-crown-6) and acid scavengers (e.g. 3,4-dihydro-2H-pyrido[1,2-a]pyrimidin-2-one).

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 80°C, more preferably from 0°C to room temperature. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of

from 10 minutes to 3 days, more preferably from 30 minutes to 1 day, will usually suffice.

In the case of the carboxylic acid derivative wherein the group X' of the compound of formula (IX) represents a hydroxy group, this reaction can also be accomplished by reacting the compounds of formulae (VIII) and (IX) with the condensing agent described in Step A1b(ii) in the above solvent in the presence or absence of the above base.

Step A6b

The ring-closing alkylation reaction in this stage is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile, propionitrile and isobutyronitrile; amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone, N-methylpyrrolidinone and hexamethylphosphoric triamide; and sulphoxides, such as dimethyl sulphoxide and sulfolane. Of these, we particularly prefer the ethers and amides, most preferably tetrahydrofuran or dimethylformamide.

There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: alkali metal carbonates, such as sodium carbonate, potassium carbonate and lithium carbonate; alkali metal hydrogencarbonates, such as sodium hydrogencarbonate, potassium hydrogencarbonate and lithium hydrogencarbonate; alkali metal hydrides, such as lithium hydride, sodium hydride and potassium hydride; alkali metal hydroxides, such as sodium hydroxide, potassium hydroxide, barium hydroxide and lithium hydroxide; alkali metal fluorides, such as sodium fluoride and potassium fluoride; and alkali metal alkoxides, such as sodium methoxide, sodium ethoxide, potassium methoxide, potassium ethoxide, potassium t-butoxide and lithium methoxide. Of these, we particularly prefer the alkali metal hydrides and alkali metal alkoxides.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 100°C, more preferably from 0 to 50°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 24 hours, more preferably from 30 minutes to 12 hours, will usually suffice.

Step A7

In this Step, a compound of formula (XI) is prepared by reducing the amide group of a compound of formula (X) in a solvent using a reducing agent to convert into an imino group; it is then optionally reprotected with a group R¹².

The reaction in the main step is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; and ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether. Of these, we particularly prefer the ethers, most preferably diethyl ether or tetrahydrofuran.

There is likewise no particular restriction on the nature of the reducing agents used, and any reducing agent commonly used in reactions of this type may equally be used here. Examples of such reducing agents include: hydride reagents, such as alkali metal borohydrides (e.g. sodium borohydride or lithium borohydride), aluminium hydride compounds (e.g. lithium aluminium hydride or lithium tri-t-butoxyaluminumhydride), sodium tellurium hydride, and organic aluminium hydride reducing agents [e.g. diisobutylaluminium hydride or sodium bis(methoxyethoxy)aluminium hydride] and borane reducing agents (e.g. borane-dimethyl sulphide complex or borane-tetrahydrofuran complex, etc.). Of these, we particularly prefer the aluminium hydride compounds and borane reducing agents, further still more prefer the borane reducing agents, most preferably borane-dimethyl sulphide complex.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -78 to 150°C, more preferably from -20 to 100°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 5 minutes

to 24 hours, more preferably from 10 minutes to 2 hours, will usually suffice.

Step A8

In this Step, a compound of formula (XIII) in which an imino group of the compound of formula (XI) is modified with a group of formula -A-B-R¹ (A, B and R¹ are as defined above) is prepared by reacting the compound of formula (XI) with a compound of formula (XII) in a solvent and in the presence of a base.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane, heptane, ligroin and petroleum ether; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; ketones, such as acetone, methyl ethyl ketone, methyl isobutyl ketone, isophorone and cyclohexanone; nitro compounds, such as nitroethane and nitrobenzene; and nitriles, such as acetonitrile and isobutyronitrile. Of these, we particularly prefer the halogenated hydrocarbons and ethers, most preferably methylene chloride or tetrahydrofuran.

There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: organic bases such as *N*-methylmorpholine, triethylamine, tripropylamine, tributylamine, diisopropylethylamine, dicyclohexylamine, *N*-methylpiperidine, pyridine, 4-pyrrolidinopyridine, picoline, 4-(*N,N*-dimethylamino)pyridine, 2,6-di(*t*-butyl)-4-methylpyridine, quinoline, *N,N*-dimethylaniline, *N,N*-diethylaniline, 1,5-diazabicyclo[4.3.0]non-5-ene (DBN), 1,4-diazabicyclo[2.2.2]octane (DABCO) and 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU). Of these, we particularly prefer triethylamine or diisopropylethylamine.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 100°C, more preferably from 0 to 20°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 5 minutes to 24 hours, more preferably from 10 minutes to 12 hours, will usually suffice.

When A represents a carbonyl group, this Step may also be accomplished by reacting the compound of formula (XI) with a compound of formula R¹-B-A-OH (in which A, B and R¹ are as defined above) and a condensing agent in a solvent in the presence or absence of a base.

Examples of the condensing agent which may be used include those described above in relation to Step A1b(ii). Of these, we prefer a combination of a phosphonate and one or more of the bases described below.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane and heptane; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, *N*-methyl-2-pyrrolidone, *N*-methylpyrrolidinone and hexamethylphosphoric triamide.

There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: organic bases such as *N*-methylmorpholine, triethylamine, tributylamine, diisopropylethylamine, dicyclohexylamine, *N*-methylpiperidine, pyridine, 4-pyrrolidinopyridine, picoline, 4-(*N,N*-dimethylamino)pyridine, 2,6-di(*t*-butyl)-4-methylpyridine, quinoline, *N,N*-dimethylaniline and *N,N*-diethylaniline.

If desired, 4-(*N,N*-dimethylamino)pyridine or 4-pyrrolidinopyridine can be used in a catalytic amount in combination with one or more of the other bases. The efficiency of the reaction may, if desired, be improved by carrying it out in the presence of one or more of the following: dehydrating agents (e.g. molecular sieves), quaternary ammonium salts (e.g. benzytriethylammonium chloride or tetrabutylammonium chloride), crown ethers (e.g. dibenzo-18-crown-6) and acid scavengers (e.g. 3,4-dihydro-2*H*-pyrido[1,2-*a*]pyrimidin-2-one).

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 80°C, more preferably from 0°C to room temperature. The time required for the reaction may also vary

widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 3 days, more preferably from 30 minutes to 1 day, will usually suffice.

5 Step A9

In this Step, a compound of formula (XIV) is prepared by removing the group R^{12} (where R^{12} is a group other than a hydrogen atom) from the compound of formula (XIII) and converting the resulting hydroxy group into an elimination group Y'' , which process may be effected by the procedure described in the first stage of Step A4.

10 The method used to remove the group R^{12} will vary depending on the nature of that group. However, methods of removing such groups are well known in this technical field.

For example, when the group R^{12} is a silyl group, it can normally be removed by treatment with a compound forming a fluorine anion (e.g. tetrabutylammonium fluoride, hydrogen fluoride, hydrogen fluoride-pyridine or potassium fluoride) or by treatment with an organic acid (e.g. acetic acid, methanesulphonic acid, p-toluenesulphonic acid, trifluoromethanesulphonic acid or *p*-bromocatechol borane) or an inorganic acid (e.g. hydrochloric acid).

15 When the group R^{12} is removed by the fluorine anion, the reaction may sometimes be promoted by adding an organic acid, such as formic acid, acetic acid or propionic acid.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; water; and organic acids, such as acetic acid; or a mixture of any two or more thereof.

25 The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 0 to 150°C, more preferably from 10 to 150°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 1 to 48 hours, more preferably from 2 to 12 hours, will usually suffice.

When the group R^{12} is an aralkyl or aralkyloxycarbonyl group, it may preferably be removed by contacting it with a reducing agent (preferably by a catalytic hydrogenation reaction at ambient temperature in the presence of a catalyst) in a solvent or by using an oxidizing agent.

35 The catalytic hydrogenation reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: alcohols, such as methanol, ethanol and isopropanol; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran and dioxane; aromatic hydrocarbons, such as benzene, toluene and xylene; aliphatic hydrocarbons, such as hexane and cyclohexane; esters, such as ethyl acetate and propyl acetate; amides, such as formamide, dimethylformamide, dimethylacetamide, *N*-methyl-2-pyrrolidone and hexamethylphosphoric triamide; fatty acids, such as formic acid and acetic acid; water; or a mixture of any two or more thereof. Of these, we particularly prefer the alcohols, fatty acids and a mixture of an alcohol and an ether, a mixture of an alcohol and water or a mixture of a fatty acid and water.

45 There is likewise no particular restriction on the nature of the catalysts used, and any catalyst commonly used in catalytic hydrogenation reactions of this type may equally be used here. Examples of such catalysts include: palladium-on-carbon, palladium black, Raney nickel, platinum oxide, platinum black, rhodium-aluminium oxide, triphenylphosphine-rhodium chloride and palladium-barium sulphate.

There is no particular restriction on the pressure employed, and the reaction is normally conducted under a pressure within the range of from 1 to 10 atmospheres.

50 The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 0 to 100°C, more preferably from 20 to 70°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 5 minutes to 48 hours, more preferably from 1 to 24 hours, will usually suffice.

55 If the protecting group is to be removed by oxidation, the reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. A water-containing organic solvent is preferred. Examples of suitable organic solvents include: ketones, such as ace-

tone; halogenated hydrocarbons, especially halogenated aliphatic hydrocarbons, such as methylene chloride, chloroform and carbon tetrachloride; nitriles, such as acetonitrile; ethers, such as diethyl ether, tetrahydrofuran and dioxane; amides, such as dimethylformamide, dimethylacetamide and hexamethylphosphoric triamide; and sulphoxides, such as dimethyl sulphoxide.

There is likewise no particular restriction on the nature of the oxidizing agents used, and any oxidizing agent commonly used in reactions of this type may equally be used here. Examples of such oxidizing agents include: potassium persulphate, sodium persulphate, cerium ammonium nitrate (CAN) and 2,3-dichloro-5,6-dicyano-p-benzoquinone (DDQ).

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 0 to 150°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 24 hours will usually suffice.

It is also possible to remove the protecting group by reaction with an alkali metal (e.g. metallic lithium or metallic sodium) in liquid ammonia or an alcohol (e.g. methanol or ethanol) at a temperature of from -78 to -20°C.

It is also possible to remove the protecting group by reaction with aluminium chloride-sodium iodide or an alkylsilyl halide (e.g. trimethylsilyl iodide) in a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: nitriles, such as acetonitrile; halogenated hydrocarbons, especially halogenated aliphatic hydrocarbons, such as methylene chloride and chloroform; or a mixture of any two or more thereof.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 0 to 50°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 5 minutes to 3 days will usually suffice.

When the reaction substrate has a sulphur atom, aluminium chloride-sodium iodide is preferably used.

When the group R¹² is an aliphatic acyl group, an aromatic acyl group or an alkoxy carbonyl group, it is preferably removed by treating it with a base in a solvent.

There is no particular restriction on the nature of the bases used provided that it has no adverse effect on any other part of the compound, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: metal alkoxides, such as sodium methoxide; alkali metal carbonates, such as sodium carbonate, potassium carbonate or lithium carbonate; alkali metal hydroxides, such as sodium hydroxide, potassium hydroxide, lithium hydroxide or barium hydroxide; or various forms of ammonia, such as aqueous ammonia or concentrated ammonia-methanol.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent and any solvent commonly used for hydrolysis reactions may equally be employed here. Examples of suitable solvents include: water; organic solvents, such as alcohols (e.g. methanol, ethanol or propanol) and ethers (e.g. tetrahydrofuran or dioxane); or a mixture of water and one or more of the above organic solvents are preferred.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, in order to inhibit secondary reactions, we find it convenient to carry out the reaction at a temperature of from 0 to 150°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 1 to 10 hours will usually suffice.

When the group R¹² is an alkoxy methyl group, a tetrahydropyranyl group, a tetrahydrothiopyranyl group, a tetrahydrofuranyl group, a tetrahydrothiofuranyl group or a substituted ethyl group, it is normally removed by treatment with an acid in a solvent.

There is likewise no particular restriction on the nature of the acids used, and any acid commonly used in reactions of this type may equally be used here. Examples of such acids include: Brønsted acids, such as inorganic acids (e.g. hydrochloric acid, sulphuric acid or nitric acid); organic acids (e.g. acetic acid, trifluoroacetic acid, methanesulphonic acid or p-toluenesulphonic acid); and Lewis acids, such as boron trifluoride. A strong acidic cation exchange resins, such as Dowex (trade mark) 50W, can also be used.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on

the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane, heptane, ligroin and petroleum ether; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; alcohols, such as methanol, ethanol, propanol, isopropanol, butanol, isobutanol, t-butanol, isoamyl alcohol, diethylene glycol, glycerin, octanol, cyclohexanol and methylcellosolve; ketones, such as acetone, methyl ethyl ketone, methyl isobutyl ketone, isophorone and cyclohexanone; water; or a mixture of any two or more thereof. Of these, we particularly prefer the halogenated hydrocarbons, esters and ethers.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -10 to 100°C, more preferably from -5 to 50°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 5 minutes to 48 hours, more preferably from 30 minutes to 10 hours, will usually suffice.

When the group R¹² is an alkenyloxycarbonyl group, it is preferably removed by treatment with a base under the same condition as are used to remove the group R¹² when that group is an aliphatic acyl group, an aromatic acyl group or an alkoxycarbonyl group.

In the case of an allyloxycarbonyl group, it may be removed by using palladium and triphenylphosphine or bis(methyldiphenylphosphine)(1,5-cyclooctadiene)iridium (I) hexafluorophosphate, which is simple and can be conducted with few side reactions.

Step A10

In this Step, a compound of formula (I), which is a compound of the present invention, is prepared by reacting a compound of formula (XIV) with a compound of formula (XV) in a solvent and in the presence of a base.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane, heptane, ligroin and petroleum ether; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; ketones, such as acetone, methyl ethyl ketone, methyl isobutyl ketone, isophorone and cyclohexanone; nitro compounds, such as nitroethane and nitrobenzene; nitriles, such as acetonitrile and isobutyronitrile; amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone, N-methylpyrrolidone and hexamethylphosphoric triamide; and sulphoxides, such as dimethyl sulphoxide and sulfolane. Of these, we prefer the amides, ethers and nitriles, most preferably the amides.

There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: a combination of a metal iodide (e.g. potassium iodide) and an inorganic base, such as an alkali metal carbonate (e.g. sodium carbonate, potassium carbonate or lithium carbonate), an alkali metal hydrogencarbonate (e.g. sodium hydrogencarbonate, potassium hydrogencarbonate or lithium hydrogencarbonate), an alkali metal hydride (e.g. lithium hydride, sodium hydride or potassium hydride), an alkali metal hydroxide (e.g. sodium hydroxide, potassium hydroxide, barium hydroxide or lithium hydroxide) or an alkali metal fluoride (e.g. sodium fluoride or potassium fluoride); or an organic base such as N-methylmorpholine, triethylamine, tripropylamine, tributylamine, diisopropylethylamine, dicyclohexylamine, N-methylpiperidine, pyridine, 4-pyrrolidinopyridine, picoline, 4-(N,N-dimethylamino)pyridine, 2,6-di(t-butyl)-4-methylpyridine, quinoline, N,N-dimethylaniline, N,N-diethylaniline, 1,5-diazabicyclo[4.3.0]non-5-ene (DBN), 1,4-diazabicyclo[2.2.2]octane (DABCO) and 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU). Of the various bases, we particularly prefer the combination of a metal iodide and an inorganic base, most preferably a combination of a metal iodide and an alkali metal hydrogencarbonate.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 0 to 150°C, more preferably from 20 to 120°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 30 minutes to 48 hours, more preferably from 1 to 12 hours, will usually suffice.

After the completion of the respective reactions described above, the compounds produced by these reactions may be collected from the reaction mixture by a conventional process.

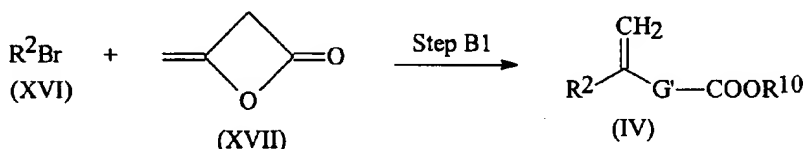
For example, in one suitable isolation procedure, the reaction mixture is appropriately neutralized and, after insoluble matter, if any, has been removed by filtration, a water-immiscible solvent (e.g. ethyl acetate) is added. The organic layer is separated, and washed with, for example, water, and the desired compound is dried, for example over anhydrous magnesium sulphate or anhydrous sodium sulphate. The solvent is then removed by distillation under reduced pressure to give the desired compound.

The desired compound can, if desired, be isolated and purified by any one or more of the following procedures: recrystallization; reprecipitation; or another process which is normally used for isolation and purification of organic compounds, for example an adsorption column chromatography process using a carrier, such as silica gel, alumina or magnesium-silica gel, Florisil; a process using a synthetic adsorbent, for example, partition column chromatography using Sephadex (trade mark) LH-20 (manufactured by Pharmacia Co.), Amberlite (trade mark) XAD-11 (manufactured by Rohm & Haas Co.), Diaion (trade mark) HP-20 (manufactured by Mitsubishi Kasei Co., Ltd.); a process using ion-exchange chromatography; or a normal/reverse phase liquid chromatography process (preferably high performance liquid chromatography) using silica gel or alkylated silica gel.

When isomers must be isolated, the isolation can be conducted by the above isolation and purification means after the completion of the reactions of the above respective steps or at the suitable time after the completion of the desired steps.

Reaction Scheme B:

This provides an alternative method of preparing the compound of formula (IV), which may thereafter be used as shown in Reaction Scheme A to prepare the compound of the present invention.



In the above formulae, R^2 , R^{10} and G' are as defined above.

Step B1

In this Step, a compound of formula (IV) is prepared by: reacting a compound of formula (XVI) with metallic magnesium according to the process of Ito *et al.* [described in Bull. Chem. Soc. Jpn., Vol. 64, page 3746 (1991)], to give a Grignard reagent; coupling this Grignard reagent with diketene of formula (XVII) in a solvent in the presence or absence of a Lewis acid and in the presence of a catalytic amount (preferably from 0.1 to 0.5 equivalents) of a palladium catalyst; and reacting the resulting carboxylic acid according to the optional step described in Step A1 to esterify it.

The reaction can be accomplished in a good yield with few by-products when conducted in the presence of the Lewis acid, which is, accordingly preferred. There is no particular restriction on the nature of the Lewis acid, if used, and any Lewis acid commonly used in reactions of this type may equally be used here. Examples of such Lewis acids include: trialkylsilyl trifluoromethanesulphonates having from 1 to 6 carbon atoms in the alkyl part, such as trimethylsilyl trifluoromethanesulphonate; aluminium salts, such as aluminium chloride; tin salts, such as tin tetrachloride; zinc salts, such as zinc bromide or zinc chloride; titanium salts, such as titanium tetrachloride; or perchlorates, such as trimethylsilyl perchlorate or triphenylmethyl perchlorate. Of these, we particularly prefer the zinc salts, most preferably zinc chloride.

The palladium catalyst used may be any one which contains palladium, and is not particularly limited. Preferred examples include organophosphine palladium compounds, such as dichloro bis(triphenylphosphine)palladium (II).

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether. Of these, we particularly prefer diethyl ether.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 50°C, more preferably from 0 to 20°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 15 minutes to 8 hours, more preferably from 30 minutes to 2 hours, will usually suffice.

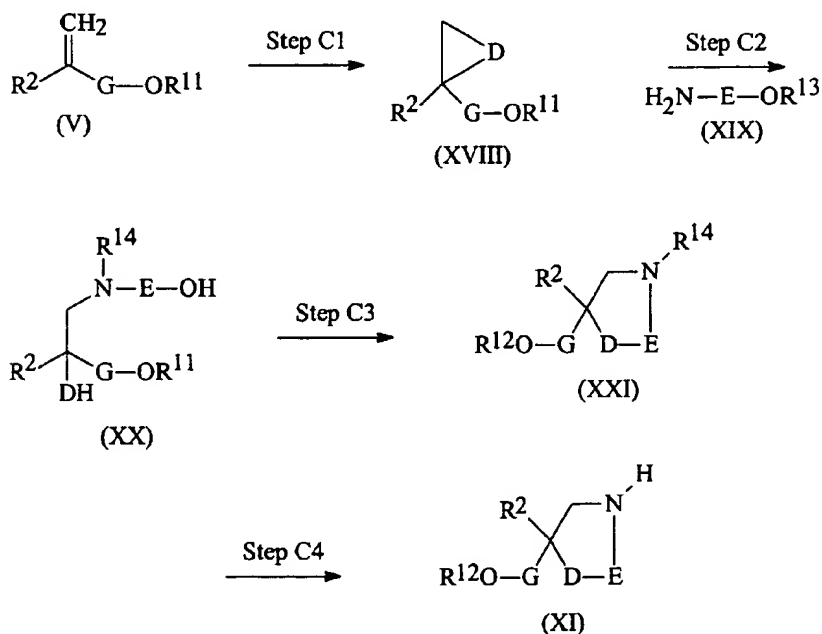
After the completion of the above reaction, the desired compound of formula (IV) may be isolated from the reaction mixture by conventional means.

For example, in one suitable isolation procedure, the reaction mixture is appropriately neutralized and, after insoluble matter, if any, has been removed by filtration, a water-immiscible solvent (e.g. ethyl acetate) is added. The organic layer is separated and washed with, for example, water. The desired compound is then dried, for example over anhydrous magnesium sulphate or anhydrous sodium sulphate. Then, the solvent is distilled off to give the desired compound.

The desired compound can, if desired, be isolated and purified by any one or more of the following procedures: recrystallization; reprecipitation; or another process which is normally used for isolation and purification of organic compounds, for example an adsorption column chromatography process using a carrier, such as silica gel, alumina or magnesium-silica gel, Florisil; a process using a synthetic adsorbent, for example, partition column chromatography using Sephadex (trade mark) LH-20 (manufactured by Pharmacia Co.), Amberlite (trade mark) XAD-11 (manufactured by Rohm & Haas Co.), Diaion (trade mark) HP-20 (manufactured by Mitsubishi Kasei Co., Ltd.); a process using ion-exchange chromatography; or a normal/reverse phase liquid chromatography process (preferably high performance liquid chromatography) using silica gel or alkylated silica gel.

Reaction Scheme C:

This provides an alternative method of preparing the compound of formula (XI), which may thereafter be used as shown in Reaction Scheme A to prepare the compound of the present invention.



In the above formulae, R^2 , R^{11} , R^{12} , D , E and G are as defined above.

R¹³ represents a hydrogen atom or a hydroxy-protecting group and may be any of the same groups defined and exemplified above for the group R¹¹.

R¹⁴ represents an amino-protecting group, and examples thereof include the aliphatic acyl groups, the aromatic acyl groups, the alkoxycarbonyl groups, the alkenyloxycarbonyl groups, the aralkyloxycarbonyl groups and the silyl groups as defined and exemplified above, preferably an alkoxycarbonyl group. Of these, we particularly prefer the t-butoxycarbonyl group.

Step C1

In this Step, an epoxy compound of formula (XVIII) is prepared by reacting the exo-methylene group of a compound of formula (V) with an oxidizing agent in a solvent.

There is no particular restriction on the nature of the oxidizing agents used, and any oxidizing agent commonly used in epoxidation reactions of olefins may equally be used here. Examples of such oxidizing agents include: peracids, such as m-chloroperbenzoic acid, 3,5-dinitroperbenzoic acid, o-carboxyperbenzoic acid, peracetic acid, pertrifluoroacetic acid and perphthalic acid; hydrogen peroxide; peroxides, such as t-butyl hydroperoxide (which may be used in combination with vanadium or a molybdenum complex); and a combination of a succinimide (e.g. N-bromosuccinimide) and an alkali. Of these, we particularly prefer the peracids, most preferably m-chloroperbenzoic acid.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, especially halogenated aliphatic hydrocarbons, such as methylene chloride and chloroform; ethers, such as diethyl ether, tetrahydrofuran, dioxane and dimethoxyethane; amides, such as dimethylformamide, dimethylacetamide and hexamethylphosphoric triamide; sulfoxides, such as dimethyl sulphoxide; alcohols, such as methanol, ethanol, propanol, isopropanol, butanol, isobutanol, t-butanol and isoamyl alcohol; dilute acids, such as aqueous sulphuric acid; dilute bases, such as an aqueous solution of sodium hydroxide; water; ketones, such as acetone and methyl ethyl ketone; organic bases, such as pyridine; nitriles, such as acetonitrile; or a mixture of any two or more of the above solvents. Of these, we particularly prefer methylene chloride.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 80°C, more preferably from -5 to 50°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 1 to 24 hours, more preferably from 2 to 12 hours, will usually suffice.

An optically active epoxy compound having a specific absolute configuration can be produced by conducting an asymmetric epoxidation reaction using a chiral ligand, for example, according to the process of Sharpless *et al.* or the process of Jacobsen *et al.* [see *Catalytic Asymmetric Synthesis*, VCH Publishers Inc. (1993)].

Step C2

In this Step, a compound of formula (XX) is prepared by ring-opening the epoxy group of the epoxy compound of formula (XVIII) using an amino alcohol compound of formula (XIX) in the presence or absence of a base (Step C2a) and then protecting the secondary amino group thus formed with a group R¹⁴ (Step C2b).

Step C2a

The ring opening reaction in the first stage is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile, propionitrile and isobutyronitrile; amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone, N-methylpyrrolidinone and hexamethylphosphoric triamide; and sulfoxides, such as dimethyl sulphoxide and sulfolane. Of these, we particularly prefer the nitriles.

There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: alkali metal perchlorates, such as lithium perchlorate and sodium perchlorate; alkali metal carbonates, such as sodium carbonate, potassium carbonate and lith-

ium carbonate; alkali metal hydrogencarbonates, such as sodium hydrogencarbonate, potassium hydrogencarbonate and lithium hydrogencarbonate; alkali metal hydrides, such as lithium hydride, sodium hydride and potassium hydride; alkali metal hydroxides, such as sodium hydroxide, potassium hydroxide, barium hydroxide and lithium hydroxide; alkali metal fluorides, such as sodium fluoride and potassium fluoride; alkali metal alkoxides, such as sodium methoxide, sodium ethoxide, potassium methoxide, potassium ethoxide, potassium t-butoxide and lithium methoxide; alkali metal mercaptans, such as sodium methylmercaptan, sodium ethylmercaptan; and organic bases such as N-methylmorpholine, triethylamine, tripropylamine, tributylamine, diisopropylethylamine, dicyclohexylamine, N-methylpiperidine, pyridine, 4-pyrrolidinopyridine, picoline, 4-(N,N-dimethylamino)pyridine, 2,6-di(t-butyl)-4-methylpyridine, quinoline, N,N-dimethylaniline, N,N-diethylaniline, 1,5-diazabicyclo[4.3.0]non-5-ene (DBN), 1,4-diazabicyclo[2.2.2]octane (DABCO) and 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU).

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 150°C, more preferably from room temperature to 100°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 3 days, more preferably from 30 minutes to 1 day, will usually suffice.

Step C2b

Protection of the secondary amino group with a group R¹⁴ in this stage may be carried out as follows.

Step C2b(i)

The unprotected compound is reacted with a suitable amount, for example from 1 to 4 equivalents (preferably from 2 to 3 equivalents) of a compound of formula R¹⁴-X" (in which R¹⁴ is as defined above and in which X" represents an elimination group capable of being eliminated as a nucleophilic residue, and is not specifically limited), or with a compound of formula R¹⁴-O-R¹⁴ (in which R¹⁴ is a group of the acyl type selected from those defined above for R¹⁴), in a solvent in the presence or absence of a base. Preferred examples of such elimination groups include: halogen atoms, such as the chlorine, bromine and iodine atoms; alkoxycarbonyloxy groups having from 1 to 6 carbon atoms in the alkoxy part, such as the methoxycarbonyloxy and ethoxycarbonyloxy groups; haloalkylcarbonyloxy groups having from 1 to 6 carbon atoms in the alkyl part, such as the chloroacetoxy, dichloroacetoxy, trichloroacetoxy and trifluoroacetoxy groups; alkanesulphonyloxy groups having from 1 to 6 carbon atoms, such as the methanesulphonyloxy and ethanesulphonyloxy groups; haloalkanesulphonyloxy groups having from 1 to 6 carbon atoms, such as the trifluoromethanesulphonyloxy and pentafluoroethanesulphonyloxy groups; arylsulphonyloxy groups in which the aryl part is as defined and exemplified above in relation to R¹ etc., such as the benzenesulphonyloxy, p-toluenesulphonyloxy and p-nitrobenzenesulphonyloxy groups. Of these, we particularly prefer the halogen atoms, the haloalkanesulphonyloxy groups and the arylsulphonyloxy groups.

Specific examples of such compounds of formula R¹⁴-X" include: acyl halides, such as aliphatic acyl halides (e.g. acetyl chloride, propionyl chloride, butyryl chloride, valeryl chloride and hexanoyl chloride), alkoxycarbonyl halides having from 1 to 6 carbon atoms in the alkoxy part (e.g. methoxycarbonyl chloride, methoxycarbonyl bromide, ethoxycarbonyl chloride, propoxycarbonyl chloride, butoxycarbonyl chloride and hexyloxycarbonyl chloride), and arylcarbonyl halides, (e.g. benzoyl chloride, benzoyl bromide and naphthoyl chloride); silyl halides, such as t-butyltrimethylsilyl chloride, trimethylsilyl chloride, triethylsilyl chloride, triethylsilyl bromide, triisopropylsilyl chloride, dimethylisopropylsilyl chloride, diethylisopropylsilyl chloride, t-butylphenylsilyl chloride, diphenylmethylsilyl chloride and triphenylsilyl chloride or the corresponding silyl trifluoromethanesulphonates; aralkyl halides, such as benzyl chloride and benzyl bromide; or carbonyloxyalkyl halides, such as pivaloyloxymethyl chloride or ethoxycarbonyloxymethyl chloride.

Specific examples of such compounds of formula R¹⁴-O-R¹⁴ include aliphatic carboxylic anhydrides, such as acetic anhydride, propionic anhydride, valeric anhydride or hexanoic anhydride, and carbonates, such as di-t-butyl dicarbonate. A mixed acid anhydride (e.g. the mixed anhydride of formic and acetic acids) can also be used.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane, heptane, ligroin and petroleum ether; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone, N-methylpyrrolidinone and

hexamethylphosphoric triamide.

There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: organic bases such as *N*-methylmorpholine, triethylamine, tributylamine, diisopropylethylamine, dicyclohexylamine, *N*-methylpiperidine, pyridine, 4-pyrrolidinopyridine, picoline, 4-(*N,N*-dimethylamino)pyridine, 2,6-di(*t*-butyl)-4-methylpyridine, quinoline, *N,N*-dimethylaniline and *N,N*-diethylaniline.

If desired, 4-(*N,N*-dimethylamino)pyridine or 4-pyrrolidinopyridine can be used in a catalytic amount in combination with one or more of the other bases. The efficiency of the reaction may, if desired, be improved by effecting it in the presence of one or more of the following: quaternary ammonium salts (e.g. benzyltriethylammonium chloride or tetrabutylammonium chloride) and crown ethers (e.g. dibenzo-18-crown-6).

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 °C to the reflux temperature of the solvent employed, more preferably from 0°C to room temperature. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 3 days, more preferably from 1 hour to 1 day, will usually suffice.

Step C2b(ii)

The unprotected compound is reacted with a compound of formula $R^{14}\text{-OH}$ (in which R^{14} is a group of the acyl type selected from those defined above for R^{14}) in a solvent in the presence of a condensing agent and in the presence or absence of a base.

Examples of condensing agents which may be used include those given above in Step A1b(ii).

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane and heptane; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, *N*-methyl-2-pyrrolidone, *N*-methylpyrrolidinone and hexamethylphosphoric triamide.

Examples of bases which may be used in this step are as given above in relation to Step C2b(i).

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 80°C, more preferably from 0°C to room temperature. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 3 days, more preferably from 30 minutes to 1 day, will usually suffice.

Step C2b(iii)

Particularly, when R^{14} is a *t*-butoxycarbonyl group or a benzyloxycarbonyl group, the compound formed in Step C1b is reacted with a *t*-butoxycarbonylating agent or a benzyloxycarbonylating agent in a solvent in the presence of a base, and thus the secondary amino group can be protected with the R^{14} group.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane and heptane; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; amides, such as formamide, dimethylformamide, dimethylacetamide, *N*-methyl-2-pyrrolidone, *N*-methylpyrrolidinone and hexamethylphosphoric triamide; water; and mixtures of water with any one or more of the above organic solvents.

The bases employed in this Step may be any of those suggested above in Step C1c(i).

There is likewise no particular restriction on the nature of the t-butoxycarbonylating agents used, and any t-butoxycarbonylating agent commonly used in reactions of this type may equally be used here. Examples of such t-butoxycarbonylating agents include: di-t-butyl dicarbonate, 2-(t-butoxycarbonyloxyimino)-2-phenyl acetonitrile, t-butyl 2-(4,6-dimethylpyrimidin-2-yl)thiolcarboxylate and 1,2,2,2-tetrachloroethyl t-butyl carbonate, more preferably di-t-butyl dicarbonate.

There is likewise no particular restriction on the nature of the benzyloxycarbonylating agents used, and any benzyloxycarbonylating agent commonly used in reactions of this type may equally be used here. Examples of such benzyloxycarbonylating agents include: benzyloxycarbonyl chloride, benzyloxycarbonyl cyanide and dibenzyl dicarbonate.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20°C to 80°C, more preferably from 0°C to room temperature. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to three days, more preferably from 30 minutes to 24 hours, will usually suffice.

Step C3

In this Step, a compound of formula (XXI) is prepared by dehydrating a compound of formula (XX) using the Mitsunobu reaction

There is no particular restriction on the nature of the reagents used in the Mitsunobu reaction, and any reagent commonly used in reactions of this type may equally be used here. Examples of such reagents include: combination of azo compounds, such as dialkyl azodicarboxylates having from 1 to 6 carbon atoms in the alkyl part (e.g. diethyl azodicarboxylate or diisopropyl azodicarboxylate) or azodicarbonyls [e.g. 1,1'-(azodicarbonyl)dipiperidine]; and phosphines, such as triarylphosphines in which the aryl part is as defined and exemplified above in relation to R¹ etc. (e.g. triphenylphosphine) or trialkylphosphines having from 1 to 6 carbon atoms in each alkyl part (e.g. tributylphosphine). Of these, we particularly prefer the combination of a dialkyl azodicarboxylate and a triarylphosphine, most preferably a combination of diethyl azodicarboxylate and triphenylphosphine.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone, N-methylpyrrolidinone and hexamethylphosphoric triamide; and sulphoxides, such as dimethyl sulphoxide and sulfolane. Of these, we prefer the aromatic hydrocarbons and the ethers.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20 to 100°C, more preferably from 0 to 50°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 3 days, more preferably from 30 minutes to 12 hours, will usually suffice.

In the course of carrying out the present step, a group R¹¹ is sometimes removed. In that case, the hydroxy group can be protected again according to the second part of Step A2.

Step C4

In this Step, a compound of formula (XI) is prepared by simultaneously or separately conducting the following:

- (i) removal of the amino-protecting group R¹⁴ to leave an amino group, and
- (ii) optional removal of a group R¹² when the group R¹² is a hydroxy-protecting group.

Step C4(i)

The reaction employed to remove the group R¹⁴ will vary, depending on the nature of the group, but reactions which

may be employed to remove such groups are well known in this technical field.

Step C4(i)a

For example, if the amino-protecting group is a silyl group, it is normally removed by treatment with a compound which forms fluorine anions, such as tetrabutylammonium fluoride.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: ethers, such as tetrahydrofuran or dioxane.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of about room temperature. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 18 hours will usually suffice.

Step C4(i)b

When the amino-protecting group is an aliphatic acyl group, an aromatic acyl group, an alkoxycarbonyl group or a substituted methylene group which forms a Schiff base, it can be removed by treatment with an acid or a base in the presence of an aqueous solvent.

There is no particular restriction on the nature of the acids used, and any acid commonly used in reactions of this type may equally be used here. Examples of such acids include: inorganic acids, such as hydrochloric acid, sulphuric acid, phosphoric acid and hydrogen bromide; and Lewis acids, such as *p*-bromocatechol borane. Of these, we prefer *p*-bromocatechol borane or hydrochloric acid.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitro compounds, such as nitroethane and nitrobenzene. Of these, we particularly prefer the halogenated hydrocarbons.

There is likewise no particular restriction on the nature of the bases used, provided that it has no adverse effect on any other part of the compound, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: metal alkoxides, such as sodium methoxide; alkali metal carbonates, such as sodium carbonate, potassium carbonate and lithium carbonate; alkali metal hydroxides, such as sodium hydroxide, potassium hydroxide and lithium hydroxide; and ammonia in various forms, such as aqueous ammonia or concentrated methanolic ammonia.

In the hydrolysis using a base, isomerization sometimes occurs.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, and any solvent commonly used for hydrolysis reactions may be used, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: water; organic solvents, such as alcohols (e.g. methanol, ethanol or propanol) and ethers (e.g. tetrahydrofuran or dioxane); or a mixture of water and one or more of the above organic solvents.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, in order to inhibit side reactions, we find it convenient to carry out the reaction at a temperature of from 0 to 150°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 1 to 10 hours will usually suffice.

Step C4(i)c

When the amino-protecting group is an alkyl or alkylloxycarbonyl group, we prefer to remove it by contacting it with a reducing agent in a solvent (preferably by catalytic hydrogenation at ambient temperature in the presence of catalyst) or by using an oxidizing agent.

The catalytic hydrogenation reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: organic solvents, such as alcohols (e.g. methanol, ethanol or isopropanol), ethers (e.g. diethyl ether, tetrahydrofuran or dioxane), aromatic hydrocarbons (e.g. toluene, benzene or xylene), esters (e.g. ethyl acetate or propyl acetate) and aliphatic acids (e.g. acetic acid) or a mixture of one or more of these organic solvents and water.

There is likewise no particular restriction on the nature of the catalysts used in the catalytic hydrogenation reaction, and any catalyst commonly used in reactions of this type may equally be used here. Examples of such catalysts include: palladium-on-carbon, palladium black, Raney nickel, platinum oxide, platinum black, rhodium-aluminium oxide, triphenylphosphine-rhodium chloride and palladium-barium sulphate.

There is no particular restriction on the pressure employed, and the reaction is normally conducted under a pressure within the range of from 1 to 10 atmospheres.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 0 to 100°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 1 to 24 hours will usually suffice.

The oxidation reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. A mixture of water and an organic solvent is preferred. Examples of suitable organic solvents include: ketones, such as acetone; halogenated hydrocarbons, especially halogenated aliphatic hydrocarbons, such as methylene chloride, chloroform and carbon tetrachloride; nitriles, such as acetonitrile; ethers, such as diethyl ether, tetrahydrofuran and dioxane; and amides, such as dimethylformamide, dimethylacetamide and hexamethylphosphoric triamide.

There is likewise no particular restriction on the nature of the oxidizing agents used, and any oxidizing agent commonly used in oxidation reactions of this type may equally be used here. Examples of such oxidizing agents include: potassium persulphate, sodium persulphate, cerium ammonium nitrate (CAN) and 2,3-dichloro-5,6-dicyano-2-benzoquinone (DDQ).

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 0 to 150°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 24 hours will usually suffice.

Step C4(i)d

When the amino-protecting group is an alkenyloxycarbonyl group, it is preferably removed by treating the protected compound with a base under the same conditions as are employed when the amino-protecting group is an aliphatic acyl group, an aromatic acyl group, an alkoxycarbonyl group or a substituted methylene group which forms a Schiff base.

In case of an allyloxycarbonyl group, it may be removed by using palladium and triphenylphosphine or nickel tetracarbonyl, which is a simple process that can be conducted with few side reactions.

Step C4(ii)

The removal of the group R¹² may be carried out according to the same procedure as that described in Step A9.

After the completion of any of the above reactions, the desired compound may be isolated from the reaction mixture by conventional means.

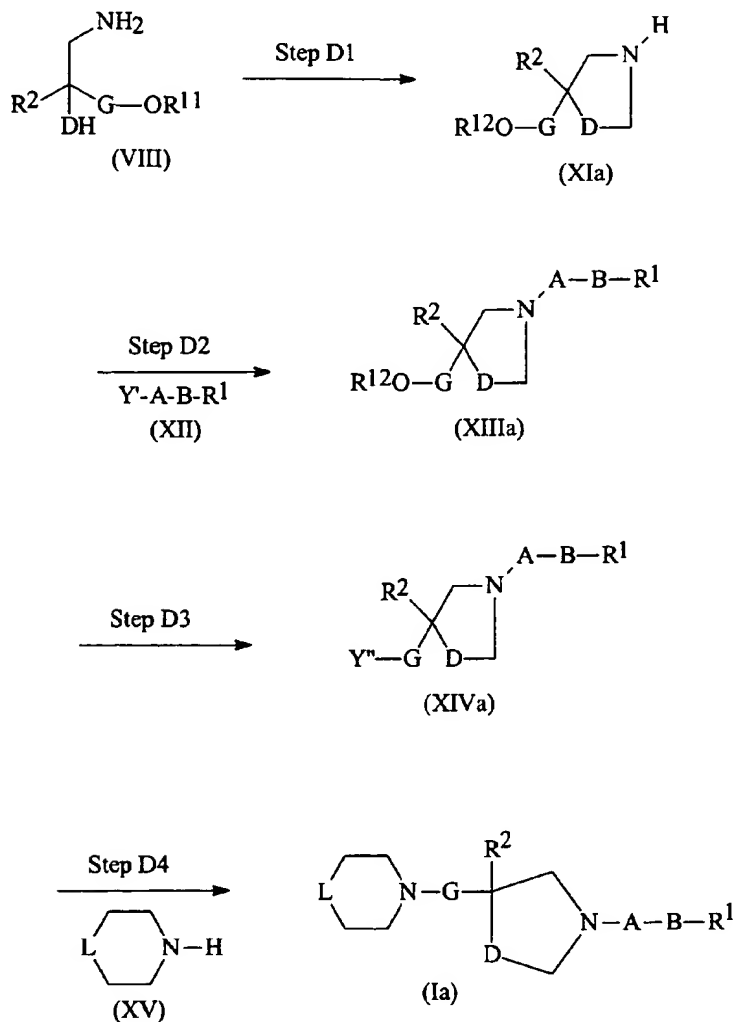
For example, in one suitable isolation procedure, the reaction mixture is appropriately neutralized and, after insoluble matter, if any, is removed by filtration, a water-immiscible organic solvent (e.g. ethyl acetate) is added. The organic layer is then separated and washed with, for example, water. The desired compound is then dried over, for example, anhydrous magnesium sulphate or anhydrous sodium sulphate. The solvent is then removed by distillation to give the desired compound.

The desired compound can, if desired, be isolated and purified by any one or more of the following procedures: recrystallization; reprecipitation; or another process which is normally used for isolation and purification of organic compounds, for example an adsorption column chromatography process using a carrier, such as silica gel, alumina or magnesium-silica gel, Florisil; a process using a synthetic adsorbent, for example, partition column chromatography using Sephadex (trade mark) LH-20 (manufactured by Pharmacia Co.), Amberlite (trade mark) XAD-11 (manufactured by

Rohm & Haas Co.), Diaion (trade mark) HP-20 (manufactured by Mitsubishi Kasei Co., Ltd.); a process using ion-exchange chromatography; or a normal/reverse phase liquid chromatography process (preferably high performance liquid chromatography) using silica gel or an alkylated silica gel.

Reaction Scheme D:

In this Reaction Scheme, a compound of formula (I) in which E represents a methylene group, that is to say a compound of formula (Ia), is prepared from a compound of formula (VIII), which may have been prepared as described in Reaction Scheme A, above.



Step D1

In this Step, a compound of formula (XIa) is prepared by reacting the amino group and the group of formula DH of a compound of formula (VIII) with paraformaldehyde in the presence or absence of an acid catalyst and in the presence or absence of a solvent to form an oxazolidine or thiazolidine ring.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane, heptane, ligroin and petroleum ether; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, ethyl acetate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; ketones, such as acetone, methyl ethyl ketone, methyl isobutyl ketone, isophorone and cyclohexanone; nitro compounds, such as nitroethane and nitrobenzene; nitriles, such as acetonitrile, isobutyronitrile; amides, such as formamide, dimethylformamide, dimethylacetamide, *N*-methyl-2-pyrrolidone, *N*-methylpyrrolidinone and hexamethylphosphoric triamide; and sulphoxides, such as dimethyl sulphoxide and sulfolane. Of these, we prefer the aromatic hydrocarbons, most preferably benzene and toluene.

There is likewise no particular restriction on the nature of the acid catalysts used, and any acid catalyst commonly used in reactions of this type may equally be used here. Examples of such acid catalysts include: Brønsted acids, such as inorganic acids (e.g. hydrochloric acid, hydrobromic acid, sulphuric acid, perchloric acid or phosphoric acid) or organic acids (e.g. acetic acid, formic acid, oxalic acid, methanesulphonic acid, *p*-toluenesulphonic acid, camphorsulphonic acid, trifluoroacetic acid or trifluoromethanesulphonic acid). Of these, we prefer the organic acids, most preferably *p*-toluenesulphonic acid.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 50 to 200°C, more preferably from 80 to 150°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 30 minutes to 48 hours, more preferably from 1 to 12 hours, will usually suffice.

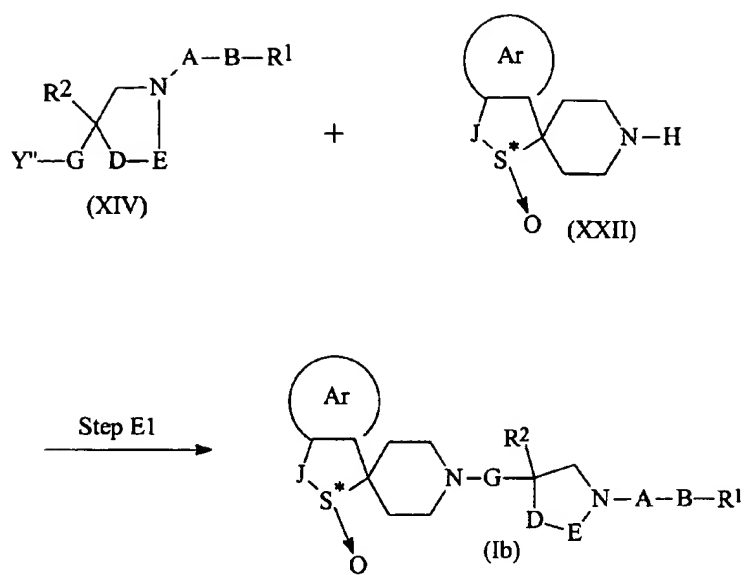
Steps D2, D3 & D4

These Steps correspond to Steps A8, A9 and A10, respectively, and may be carried out using the same reagents and reaction conditions, ultimately to give a compound of formula (Ia).

The desired compound can, if desired, be isolated and purified by any one or more of the following procedures: recrystallization; reprecipitation; or another process which is normally used for isolation and purification of organic compounds, for example an adsorption column chromatography process using a carrier, such as silica gel, alumina or magnesium-silica gel, Florisil; a process using a synthetic adsorbent, for example, partition column chromatography using Sephadex (trade mark) LH-20 (manufactured by Pharmacia Co.), Amberlite (trade mark) XAD-11 (manufactured by Rohm & Haas Co.), Diaion (trade mark) HP-20 (manufactured by Mitsubishi Kasei Co., Ltd.); a process using ion-exchange chromatography; or a normal/reverse phase liquid chromatography process (preferably high performance liquid chromatography) using silica gel or an alkylated silica gel.

Reaction Scheme E:

In this Reaction Scheme, a highly preferred compound of formula (I) in which L represents a fused ring system having a sulphoxide group in which the sulphur atom is in the *S*-configuration, that is to say the optically active sulphoxide compound of formula (Ib), is prepared.



In the above formulae:

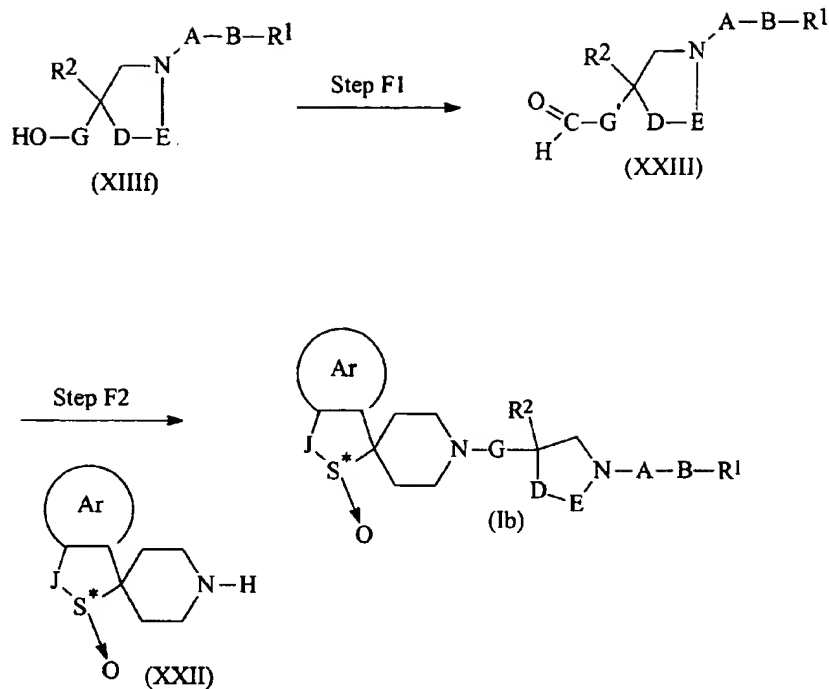
Ar , R^1 , R^2 , A , B , D , E , J and Y'' are as defined above;

$S^* \rightarrow O$ represents a sulfoxide group in which the sulphur atom is in the S -configuration.

This reaction corresponds to Step A10 and may be carried out using the same reagents and reaction conditions, to give a compound of formula (Ib).

Reaction Scheme F

This Reaction Scheme provides an alternative method of preparing the optically active sulfoxide compound of formula (Ib).



In the above formulae:

R^1 , R^2 , A, B, D, E, G, J, Ar and $S^* \rightarrow O$ are as defined above.

Step F1

In this Step, an aldehyde derivative of formula (XXIII) is prepared by oxidizing an alcohol derivative of formula (XIII f). This reaction is usually carried out in a solvent in the presence of an oxidizing agent.

There is no particular restriction on the nature of the oxidation reactions used, and any oxidation reaction commonly used for forming an aldehyde from a primary alcohol may equally be used here. Examples of such oxidation reactions include: Collins oxidation which is carried out in methylene chloride using pyridine and chromic acid; PCC oxidation which is carried out in methylene chloride using pyridinium chlorochromate (PCC); PDC oxidation which is carried out in methylene chloride using pyridinium dichromate (PDC); DMSO oxidation such as Swern oxidation which is carried out in methylene chloride using an electrophilic agent (e.g., acetic anhydride, trifluoroacetic anhydride, thionyl chloride, sulphuryl chloride, oxalyl chloride, dicyclohexylcarbodiimide, diphenylketene-p-tolylimine, *N,N*-diethylaminoacetylene, *N,N*-dimethylaminophenylacetylene, sulphur trioxide and pyridine complex) and dimethyl sulphoxide (DMSO); and manganese dioxide oxidation which is carried out in methylene chloride or benzene using manganese dioxide.

Preferably, Swern oxidation which is carried out in methylene chloride using oxalyl chloride and DMSO is employed.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -100°C to room temperature, more preferably from -78°C to -20°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to two days, more preferably from 10 minutes to 6 hours, will usually suffice.

Step F2

In this Step, an optically active sulphoxide derivative of formula (Ib) is prepared by reacting a compound of formula (XXIII) with the compound of formula (XXII) by means of a reductive amination reaction.

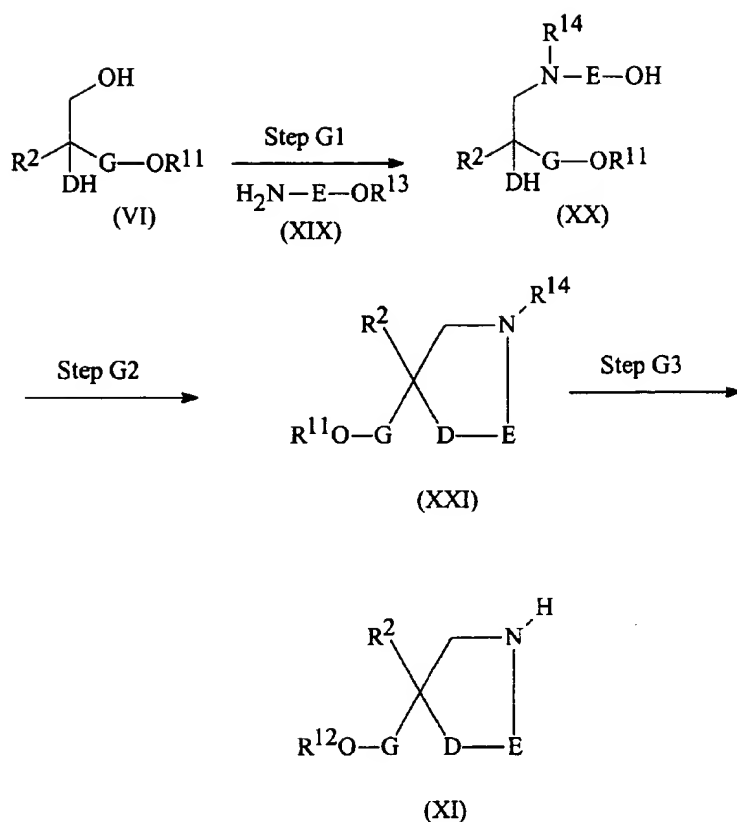
The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: alcohols such as methanol, ethanol and propanol; and ethers such as diethyl ether, tetrahydrofuran and dioxane. Of these, we prefer the alcohols, most preferably methanol or ethanol.

There is likewise no particular restriction on the nature of the reducing agents used, and any reducing agent commonly used in reactions of this type may equally be used here. Examples of such reducing agents include: hydride reagents such as alkali metal borohydrides such as sodium cyanoborohydride, sodium borohydride and lithium borohydride; aluminium hydride compounds such as lithium aluminium hydride and lithium tri-*t*-butoxyaluminumhydride; sodium tellurium hydride; and organoaluminium hydride reducing agents such as diisobutylaluminium hydride and sodium bis(methoxyethoxy)aluminium hydride. Of these, we prefer the alkali metal borohydrides, most preferably sodium cyanoborohydride.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -10°C to 100°C, more preferably from room temperature to 80°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to two days, more preferably from one hour to 6 hours, will usually suffice.

Reaction Scheme G

This provides an alternative method of preparing a compound of formula (XI), which may then be used to prepare a compound of the present invention.



In the above formulae:

R^2 , R^{11} , R^{12} , R^{13} , R^{14} , D, E and G are as defined above.

This Reaction Scheme describes the preparation of compounds of formula (XI) wherein the ring has from 6 to 8-members.

Step G1

In this Step, a compound of formula (XX) is prepared by converting the primary hydroxy group of the diol compound of formula (VI) into a group to be eliminated (Step G1a), which is then replaced by the amino group of an amino alcohol compound of formula (XIX) to form a secondary amino group (Step G1b), which is then protected with an R^{14} group (Step G1c).

Step G1a

The conversion of the primary hydroxy group of the diol compound of formula (VI) into a group to be eliminated may be effected by the procedure described in the first stage of Step A4.

Step G1b

The reaction of replacing the group to be eliminated in the resulting compound by an amino group of the amino

alcohol compound of formula (XIX) is usually carried out in a solvent using a metal salt.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; ketones, such as acetone, methyl ethyl ketone, methyl isobutyl ketone, isophorone and cyclohexanone; nitriles, such as acetonitrile, propionitrile and isobutyronitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone and N-methyl-pyrrolidinone and hexamethylphosphoric triamide. Of these, we prefer the nitriles, more preferably acetonitrile.

There is likewise no particular restriction on the nature of the metal salts used, and any metal salt commonly used in reactions of this type may equally be used here. Examples of such metal salts include: metal perchlorates, such as lithium perchlorate, magnesium perchlorate and sodium perchlorate; metal chlorides, such as calcium chloride, zinc chloride and cobalt chloride; metal tetrafluoroborates, such as lithium tetrafluoroborate and potassium tetrafluoroborate; and zinc trifluoromethanesulphonate, preferably metal perchlorates, more preferably lithium perchlorate.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20°C to 150°C, more preferably from room temperature to 100°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 30 minutes to 2 days, more preferably from 2 hours to 24 hours, will usually suffice.

Step G1c

The final step of protecting the secondary amino group with the R¹⁴ group may be carried out as described in Step C2b.

Step G2

In this Step, a compound of formula (XXI) is prepared by subjecting the compound of formula (XX) to a Mitsunobu reaction so as to effect dehydration and ring closure.

This reaction is essentially the same as that described in Step C3, and may be carried out using the same reagents and reaction conditions.

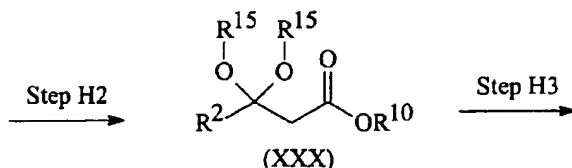
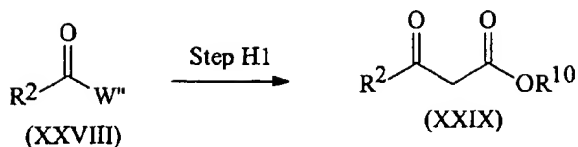
It should be noted that the R¹¹ and R¹⁴ groups may be eliminated during the process of this step. In such cases, the imino group can, if necessary, be protected again with the R¹⁴ group according to the procedures of Step G1c; while the hydroxy group can be protected again with the R¹¹ group, according to the procedures of Steps A2(i) to (iii).

Step G3

In this Step, a compound of formula (XI) is prepared by removing the R¹¹ and R¹⁴ groups of the compound of formula (XXI). This reaction is essentially the same as that described in Step C4(i), and may be carried out using the same reagents and reaction conditions.

Reaction Scheme H

This Reaction Scheme illustrates the preparation of a compound of formula (XXXII), which corresponds to the compound of formula (V) wherein the group represented by G has two carbon atoms.



In the above formulae

R^2 , R^{10} , and R^{11} are as defined above;

R^{15} represents an alkyl group having from 1 to 6 carbon atoms, as defined and exemplified above in relation to R^5 , preferably a methyl, ethyl, propyl or isopropyl group, or two groups R^{15} may together represent an alkylene group having from 1 to 6 carbon atoms, preferably a methylene, ethylene or trimethylene group; and

W'' represents a halogen atom, more preferably a chlorine atom.

Step H1

In this Step, a β -ketoester derivative of formula (XXIX) is prepared from a compound of formula (XXVIII). This reaction may be effected by conventional procedures according to, for example, the method of J. Wemple *et al.* [Synthesis, 290 (1993)].

Step H2

In this Step, a ketal is prepared by reacting the β -ketoester derivative of formula (XXIX) with an alcohol having the formula $\text{R}^{15}\text{-OH}$ (wherein R^{15} is as defined above), with an alkanediol having the formula $\text{HO-R}^{15}\text{-OH}$ (wherein R^{15} represents an alkylene group to be formed by the two R^{15} groups together) or with an orthoformic acid ester having the formula $(\text{R}^{15}\text{-O})_3\text{CH}$ (wherein R^{15} is as defined above). This reaction may be carried out, for example, in the alcohol or the alkanediol in the presence or absence of an acid catalyst with heating.

Examples of alcohols having the formula $\text{R}^{15}\text{-OH}$ include methanol, ethanol, propanol and isopropanol, preferably ethanol.

Examples of alkanediols having the formula $\text{HO-R}^{15}\text{-OH}$ include ethylene glycol and propylene glycol.

Examples of orthoformic acid esters having the formula $(R^{15}-O)_3CH$ include trimethoxymethane and triethoxymethane, preferably triethoxymethane.

This step is preferably carried out with heating in ethanol in the presence of ethyl orthoformate using p-toluenesulphonic acid as the catalyst.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 40°C to 150°C, more preferably from 50°C to 100°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 30 minutes to two days, more preferably from two hours to 12 hours, will usually suffice.

Step H3

In this Step, the ester of formula (XXX) is reduced to form a primary hydroxy group, the ketal group is then deprotected, and then the primary hydroxy group is protected with a group R^{11} , to prepare a compound of formula (XXXI).

The reaction to reduce the ester is essentially the same as that in the first stage of Step A2, and may be carried out using the same reagents and reaction conditions.

The deprotection of the ketal group is usually carried out in a solvent in the presence of an acid, preferably in chloroform using trifluoroacetic acid.

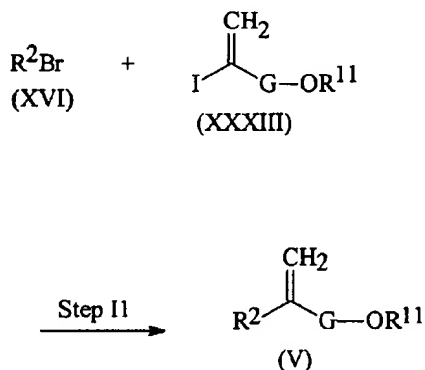
The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20°C to 100°C, more preferably from -10°C to room temperature. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 24 hours, more preferably from 30 minutes to 2 hours, will usually suffice.

The reaction protecting the primary hydroxy group may be carried out according to any of Steps A2(i) to (iii), preferably according to Step A2(i).

Step H4

In this Step, a compound of formula (XXXII) is prepared by converting the carbonyl group of the compound of formula (XXXI) into an exo-methylene group by the Wittig reaction in a solvent in the presence of a base. The reaction in this step is essentially the same as that in Step A1c, and may be carried out using the same reagents and reaction conditions.

Reaction Scheme I



In the above formulae, G, R² and R¹¹ are as defined above.

This is another process for preparing the compound of formula (V), which may then be used in Reaction Scheme A or C.

Step 11

In this Step, a compound of formula (V) is prepared by reacting a compound of formula (XVI) with metallic magnesium by any conventional method to prepare a Grignard reagent and thereafter carrying out a cross coupling reaction of the above-mentioned Grignard reagent with a compound of formula (XXXIII) using a palladium catalyst or a nickel catalyst.

There is no particular restriction on the nature of the palladium catalysts used, and any palladium catalyst commonly used in reactions of this type may equally be used here. Examples of such palladium catalysts include: tetrakis(triphenylphosphine)palladium(0), bis(acetonitrile)palladium(II) chloride, bis(triphenylphosphine)palladium(II) chloride, [1,1'-bis(diphenylphosphino)ferrocene]palladium (II) chloride, tris(dibenzylideneacetone)dipalladium(0), [1,2-bis(diphenylphosphino)ethane]dichloropalladium(II) and palladium (II) acetate.

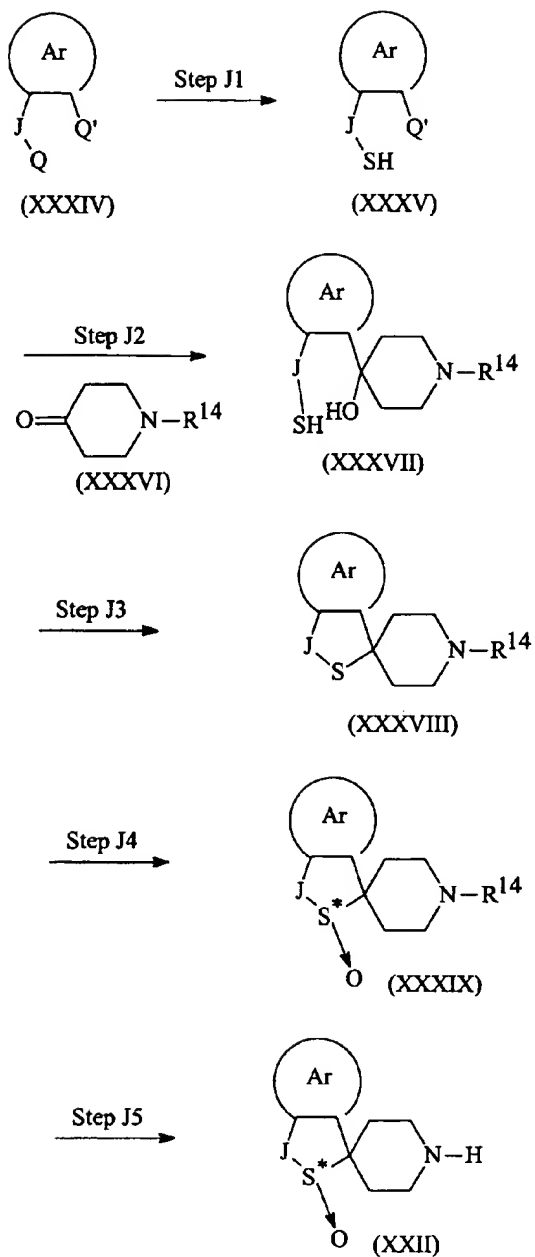
There is likewise no particular restriction on the nature of the nickel catalysts used, and any nickel catalyst commonly used in reactions of this type may equally be used here. Examples of such nickel catalysts include: bis(triphenylphosphine)nickel(II) chloride, [1,3-bis(diphenylphosphino)propane]nickel(II) chloride and nickel(II) acetylacetonate.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: ethers such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, and dimethoxyethane diethylene glycol dimethyl ether, more preferably diethyl ether or tetrahydrofuran.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 0°C to 120°C, more preferably from at room temperature to 80°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 24 hours, more preferably from 30 minutes to 5 hours, will usually suffice.

Reaction Scheme J

This Reaction Scheme illustrates the preparation of the optically active sulphoxide compound of formula (XXII) used as a starting material in Reaction Scheme E.



In the above formulae:

R¹⁴, J, the ring Ar and the formula S⁺ → O are as defined above.

Q represents a hydroxy group or a halogen atom such as a chlorine, bromine, iodine or fluorine atom; and.

Q' represents a halogen atom, preferably a bromine atom.

5 Step J1

In this Step, a compound of formula (XXXV) is prepared from a compound of formula (XXXIV).

Step J1a

10

When Q represents a hydroxy group, this step can be achieved by converting the hydroxy group of the compound of formula (XXXIV) into an acetylthio group, followed by hydrolysis of the acetylthio group using a base so as to remove the acetyl group.

The first stage of these reactions may be achieved:

15

(a) by converting the hydroxy group of the compound of formula (XXXIV) into a group to be eliminated, followed by reaction of the group to be eliminated with a salt of thioacetic acid; or

(b) by carrying out a Mitsunobu reaction using thioacetic acid.

20

The reaction converting the hydroxy group into a group to be eliminated in (a) may be carried out according to the latter substep in Step A9; whereas the thioacetyl group substitution reaction is usually achieved by reaction with a salt of thioacetic acid in a solvent.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; ketones, such as acetone, methyl ethyl ketone, methyl isobutyl ketone, isophorone and cyclohexanone; nitriles, such as acetonitrile, propionitrile and isobutyronitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone, N-methylpyrrolidinone and hexamethylphosphoric triamide. Of these, we prefer the amides, more preferably dimethylformamide.

Examples of salts of thioacetic acid which may be employed in this reaction include metal salts of thioacetic acid such as lithium thioacetate, sodium thioacetate and potassium thioacetate.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20°C to 150 °C, more preferably from room temperature to 100°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 30 minutes to two days, more preferably from 2 hours to 24 hours, will usually suffice.

The Mitsunobu reaction in (b) described above may be carried out in the same manner as in Step C3 except that the compound of formula (XXXIV) and thioacetic acid are employed.

45 The reaction eliminating the acetyl moiety in the acetylthio group can be achieved by treating it with a base in a solvent.

There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: metal alkoxides, such as sodium methoxide; alkali metal carbonates, such as sodium carbonate, potassium carbonate and lithium carbonate; alkali metal and alkaline earth metal hydroxides, such as sodium hydroxide, potassium hydroxide, lithium hydroxide and barium hydroxide; and various forms of ammonia such as aqueous ammonia water or concentrated methanolic ammonia.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, and any solvent commonly employed in hydrolysis reactions may be used, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: water; organic solvents, for example, alcohols (such as methanol, ethanol or propanol), ethers (such as tetrahydrofuran or dioxane) or a mixture of water with any one or more of these organic solvents.

55 The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the

starting material or reagent used. However, in general, in order to control side reactions, we find it convenient to carry out the reaction at a temperature of from 0 to 150°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from one to 10 hours will usually suffice.

Step J1b

Where Q is a halogen atom, this step can be achieved by heating the compound of formula (XXXIV) and thiourea in a solvent to effect reaction therebetween, followed by hydrolysis.

The first stage of this reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include alcohols, such as methanol, ethanol and isopropanol.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from room temperature to 150°C, more preferably from 50°C to 100°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 30 minutes to four days, more preferably from 12 hours to 24 hours, will usually suffice.

The hydrolysis in the latter substep is usually carried out in a mixture of water with one or more of the alcohols described above.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from room temperature to 150°C, more preferably from 50°C to 100°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 30 minutes to 6 hours, more preferably from 30 minutes to 2 hours, will usually suffice.

Step J2

In this Step, a compound of formula (XXXV) is reacted with a compound of formula (XXXVI) in a solvent in the presence of a base to provide a compound of formula (XXXVII).

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aliphatic hydrocarbons, such as hexane and heptane; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, N-methyl-2-pyrrolidone, N-methylpyrrolidinone and hexamethylphosphoric triamide. Of these, we prefer the ethers, most preferably tetrahydrofuran.

There is likewise no particular restriction on the nature of the bases used, and any base commonly used in reactions of this type may equally be used here. Examples of such bases include: alkali metal hydrides, such as lithium hydride, sodium hydride and potassium hydride; and organometallic bases, such as butyllithium, sec-butyllithium, t-butyllithium, lithium diisopropylamide and lithium bis(trimethylsilyl)amide. Of these, we prefer the organometallic bases, most preferably butyllithium.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -100°C to 100°C, more preferably from -78°C to 0°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 0.5 hour to 10 hours, more preferably from 1 hour to 6 hours, will usually suffice.

Step J3

In this Step, a compound of formula (XXXVII) is dehydrated in the presence or absence of a solvent and in the presence of an acid to close a ring and to prepare a compound of formula (XXXVIII).

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: alcohols, such as methanol and ethanol; aliphatic hydrocarbons, such as hexane and heptane; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; ketones, such as acetone, methyl ethyl ketone, methyl isobutyl ketone, isophorone and cyclohexanone; nitriles, such as acetonitrile and isobutyronitrile; and amides, such as formamide, dimethylformamide, dimethylacetamide, *N*-methyl-2-pyrrolidone, *N*-methyl pyrrolidinone and hexamethylphosphoric triamide. Of these, we prefer methanol or ethanol.

There is likewise no particular restriction on the nature of the acids used, and any acid commonly used in reactions of this type may equally be used here. Examples of such acids include: Brønsted acids, such as inorganic acids (e.g. hydrogen chloride, hydrobromic acid, sulphuric acid, perchloric acid or phosphoric acid) and organic acids (e.g. acetic acid, formic acid, oxalic acid, methanesulphonic acid, *p*-toluenesulphonic acid, trifluoroacetic acid and trifluoromethanesulphonic acid), and Lewis acids, such as boron trichloride, boron trifluoride and boron tribromide, or acidic ion exchange resins. Of these, we prefer the inorganic acids, most preferably sulphuric acid.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from 0°C to 150°C, more preferably from 50°C to 120°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 24 hours, more preferably from 5 hours to 24 hours, will usually suffice.

Step J4

In this Step, an optically active sulfoxide derivative of formula (XXXIX) from a compound of formula (XXXVIII) and is achieved by

(a) directly carrying out an asymmetric oxidation of the compound of formula (XXXVIII) or

(b) oxidizing the compound of formula (XXXVIII) and thereafter optically resolving the compound by a diastereomeric method.

(a) The asymmetric oxidation in which a sulfoxide is obtained from a sulphide may be a chemical method using an optically active oxidizing agent, a chemical method using a combination of a chiral ligand and an oxidizing agent or a biological method using baker's yeasts and microorganisms. Such an asymmetric oxidation is, for example, described in the following references:

1) G. Solladie, *Synthesis* 185 (1981):

2) K.K. Andersen, *The Chemistry of Sulphones and Sulfoxides*: S. Patai, Z. Rappaport, C.J.M. Stirling., Eds. Wiley & Sons, Ltd., Chichester, England, 1988, Chapter 3, pp 55-94: G.H. Posner., *ibid.* Chapter 16, pp 823-849:

3) H.B. Kagan *et al.*, *Synlett* 643 (1990):

4) H.B. Kagan, *Asymmetric Oxidation of Sulphides in Catalytic Asymmetric Synthesis* 1, Ojima Ed. VCH, pp 203-226 (1993):

5) F.A. Davis *et al.*, *J.Am.Chem.Soc.*, 114, 1428 (1992).

Of these, the asymmetric oxidation is preferable, in which (3'S, 2R)-(-)-*N*-(phenylsulphonyl)(3,3-dichlorocamphoryl)oxazolidine or (+)-[(8,8-dimethoxycamphoryl) sulphonyl] oxazolidine as reported by F. A. Davis *et al.* is used.

Where the asymmetric oxidation is carried out according to the method of F. A. Davis *et al.*, the reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: water; alcohols, such as methanol, ethanol, propanol, isopropanol, butanol, isobutanol and isoamyl alcohol; aliphatic hydrocarbons, such as hexane and heptane; aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride, chloroform, carbon tetrachloride, dichloroethane, chlorobenzene and dichlorobenzene; esters, such as ethyl formate, propyl acetate, butyl acetate and diethyl carbonate; ethers, such as diethyl ether, diisopropyl ether, tetrahydrofuran, dioxane, dimethoxyethane and diethylene glycol dimethyl ether; nitriles, such as acetonitrile and isobutyronitrile; and pyridine.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -50°C to 50°C, more preferably from -20°C to room temperature. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 10 minutes to 3 days, more preferably from 2 hours to 1 day, will usually suffice.

(b) When carrying out optical resolution by a diastereomeric method, a compound of formula (XXXVIII) is first oxidized by a conventional method to synthesize a racemate of the sulphoxide derivative. Then, an optically active sulphoxide derivative (XXXIX) can be obtained by removing the protecting group, as described in Step C4(i), and thereafter by forming a salt using an appropriate optically active carboxylic acid as an optical resolving reagent, and by carrying out fractional recrystallization.

The oxidation reaction of the former step is ordinarily carried out in the presence or absence of a solvent and using an oxidizing agent.

There is no particular restriction on the nature of the oxidizing agents used, and any oxidizing agent commonly used in reactions of this type in which a sulphide is oxidized to produce a sulphoxide may equally be used here. Examples of such oxidizing agents include: peracids, such as *m*-chloroperbenzoic acid, 3,5-dinitroperbenzoic acid, *o*-carboxyperbenzoic acid, peracetic acid, pertrifluoroacetic acid and perphthalic acid; and a combination of a succinimide, such as *N*-bromosuccinimide and an alkali, more preferably a peracids, most preferably *m*-chloroperbenzoic acid.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. Examples of suitable solvents include: aromatic hydrocarbons, such as benzene, toluene and xylene; halogenated hydrocarbons, such as methylene chloride and chloroform; ethers, such as diethyl ether, tetrahydrofuran, dioxane and dimethoxyethane; amides, such as dimethylformamide, dimethylacetamide and hexamethylphosphoric triamide; sulphoxides, such as dimethyl sulphoxide; alcohols, such as methanol, ethanol, propanol, isopropanol, butanol, isobutanol and isoamyl alcohol; dilute acids, such as aqueous sulphuric acid; dilute bases, such as aqueous sodium hydroxide; water; ketones, such as acetone and methyl ethyl ketone; organic bases, such as pyridine; nitriles, such as acetonitrile; or a mixture of any two or more of these solvents, more preferably a halogenated hydrocarbon, and most preferably methylene chloride.

The reaction can take place over a wide range of temperatures, and the precise reaction temperature is not critical to the invention. The preferred reaction temperature will depend upon such factors as the nature of the solvent, and the starting material or reagent used. However, in general, we find it convenient to carry out the reaction at a temperature of from -20°C to 80°C, more preferably from -5°C to 50°C. The time required for the reaction may also vary widely, depending on many factors, notably the reaction temperature and the nature of the reagents and solvent employed. However, provided that the reaction is effected under the preferred conditions outlined above, a period of from 1 hour to 24 hours, more preferably from 2 hours to 12 hours, will usually suffice.

The optical resolving agent employed for carrying out optical resolution is not particularly limited and examples include tartaric acid, camphor-10-sulphonic acid and mandelic acid, particularly preferably mandelic acid.

The reaction is normally and preferably effected in the presence of a solvent. There is no particular restriction on the nature of the solvent to be employed, provided that it has no adverse effect on the reaction or on the reagents involved and that it can dissolve the reagents, at least to some extent. A suitable solvent is acetonitrile.

The salt thus obtained by the resolution is converted to a corresponding amine by using an aqueous alkali, such as aqueous sodium hydroxide, followed by extraction with a solvent which is not dissolved in water (for example, an aromatic hydrocarbon, such as benzene, toluene or xylene; a halogenated hydrocarbon, such as methylene chloride or chloroform; or an ether, such as diethyl ether) to isolate an optically active sulphoxide derivative of formula (XXXIX).

Step J5

In this Step, a compound of formula (XXII) is prepared by removing the protective group R¹⁴ group from the compound of formula (XXXIX). The reaction may be carried out using any of the procedures described in Step C4(i).

After the completion of any of the above reactions, the desired compound may be isolated from the reaction mixture by conventional means.

For example, in one suitable isolation procedure, the reaction mixture is appropriately neutralized and, after insoluble matter, if any, has been removed by filtration, a water-immiscible solvent (e.g. ethyl acetate) is added. The organic layer is separated and washed with, for example, water. The desired compound is then dried, for example over anhydrous magnesium sulphate or anhydrous sodium sulphate. Then, the solvent is distilled off to give the desired compound.

The desired compound can, if desired, be isolated and purified by any one or more of the following procedures: recrystallization; reprecipitation; or another process which is normally used for isolation and purification of organic compounds, for example an adsorption column chromatography process using a carrier, such as silica gel, alumina or magnesium-silica gel, Florisil; a process using a synthetic adsorbent, for example, partition column chromatography using Sephadex (trade mark) LH-20 (manufactured by Pharmacia Co.), Amberlite (trade mark) XAD-11 (manufactured by Rohm & Haas Co.), Diaion (trade mark) HP-20 (manufactured by Mitsubishi Kasei Co., Ltd.); a process using ion-exchange chromatography; or a normal/reverse phase liquid chromatography process (preferably high performance liquid chromatography) using silica gel or alkylated silica gel.

The starting materials [for example, the compound of formula (XXXIV), etc.] can be purchased commercially or the materials can be easily synthesized according to well known preparation methods.

BIOLOGICAL ACTIVITY

The novel compounds of the present invention have a superior antagonistic effect on substance P and neurokinin A receptors. Moreover, since they have low toxicity, they are useful for the prevention and therapy of tachykinin-mediated diseases, examples of which include diseases of the central nervous system including anxiety, depression, psychosis and schizophrenia; neurodegenerative diseases including dementia of AIDS, Alzheimer's senile dementia, Alzheimer's disease, Down's syndrome, demyelinating disease, amyotrophic lateral sclerosis, neuropathy, peripheral neuropathy and neuralgia; respiratory diseases including chronic obstructive lung disease, bronchitis, pneumonia, bronchoconstriction, asthma and cough; inflammatory diseases, such as inflammatory bowel diseases (IBD), psoriasis, fibrosis, arthrositis, degenerative arthritis and rheumatoid arthritis; allergic diseases including eczema and rhinitis; hypersensitivity diseases including hypersensitivity to vines; ophthalmological diseases including conjunctivitis, vernal conjunctivitis, vernal catarrh, destruction of the blood-aqueous humor barrier caused by various inflammatory eye diseases, elevated intraocular pressure and miosis; skin diseases including contact dermatitis, atopic dermatitis, urticaria and other eczematoid dermatitis; addictions including alcohol dependency; somatic diseases caused by stress; sympathetic reflex dystrophy including hand and shoulder syndrome; dysthymia; undesirable immune reactions including rejection of grafts, diseases relating to immunopotentiality including systemic lupus erythematosus or immunosuppression; digestive diseases including diseases caused by abnormalities in nerves regulating the organs, colitis, ulcerative colitis and Crohn's disease; emesis including emesis induced by adverse effects of X-ray irradiation and chemotherapy, poisons, toxins, pregnancy, vestibular disorders, postoperative illness, gastrointestinal occlusion, reduced gastrointestinal movement, visceral pain, migraine headache, increased intracranial pressure, reduced intracranial pressure or administration of various drugs; urinary bladder functional diseases including cystitis and urinary incontinence; eosinophilia caused by collagen diseases, scleriosis and Fasciola hepatica infection; diseases caused by abnormal blood flow due to vasodilation or vasoconstriction including angina pectoris, migraine headache and Reynaud's disease; and, pain of pain nociceptive reception including migraine headache, headache and toothache.

The compounds of the present invention can be administered orally, for example in the form of tablets, capsules, granules, powders or syrups, or administered parenterally, for example in the form of injection preparations or suppositories. These preparations may be produced using additives, such as excipients [e.g. sugar derivatives, such as lactose, sucrose, glucose, mannitol or sorbitol; starch derivatives, such as corn starch, potato starch, α -starch, dextrin or carboxymethyl starch; cellulose derivatives, such as crystalline cellulose, low substitution degree hydroxypropylcellulose, hydroxypropylmethylcellulose, carboxymethylcellulose, carboxymethylcellulose calcium or internally cross-linked carboxymethylcellulose sodium; gum arabic; dextran; organic excipients, such as pullulan; silicate derivatives, such as light anhydrous silicic acid, synthetic aluminium silicate or magnesium aluminates metasilicate; phosphates, such as calcium phosphate; carbonates, such as calcium carbonate; inorganic excipients, such as sulphates (e.g. calcium sulphate)]; lubricants [e.g. stearic acid and metal stearates, such as calcium stearate, and magnesium stearate; talc; colloidal silica; waxes, such as bee gum, and spermaceti; boric acid; adipic acid; sulphates, such as sodium sulphate; glycol; fumaric acid; sodium benzoate; DL leucine; fatty acid sodium salts; laurylsulphates, such as sodium laurylsulphate, and magnesium laurylsulphate; silicic acids, such as anhydrous silicic acid, and silicate hydrate; and the above

starch derivatives]; binders [e.g. polyvinyl pyrrolidone, macrogol and the same compounds as those of the above excipients]; disintegrators [e.g. the same compounds as those of the above excipients and chemically modified starchcelluloses, such as croscarmellose sodium, carboxymethylstarch sodium, and cross-linked polyvinylpyrrolidone]; stabilizers [e.g. paraoxybenzoates, such as methylparaben, and propylparaben; alcohols, such as chlorobutanol, benzyl alcohol, and phenethyl alcohol; benzalkonium chloride; phenols, such as phenol, cresol; thimerosal; dehydroacetic acid; and sorbic acid]; corrigents [e.g. normally used sweetening agents, sour agents, and perfumes]; and diluents according to a per se known process.

The dose varies depending on the severity of the disease, as well as the age and body weight of the patient, and the administration route. For example, in the case of oral administration, it is advantageous that the compound of the present invention should be administered one to several times per day with a dose of from 0.01 mg/kg body weight (preferably 0.1 mg/kg body weight, lower limit) to 100 mg/kg body weight (preferably 50 mg/kg body weight, upper limit) according to the severity of diseases. In case of intravenous administration, it is advantageous that the compound of the present invention is administered one to several times per day with a dose of 0.01 mg/kg body weight (preferably 0.05 mg/kg body weight, lower limit) to 100 mg/kg body weight (preferably 50 mg/kg body weight, upper limit) according to the severity of the disease.

The biological activity of the compounds of the present invention may be assessed by the following tests.

NK₁ receptor binding test

(a) Preparation of crude lung membrane fraction

A crude membrane fraction was prepared from the lung of male Hartley guinea pigs. The guinea pigs were bled from the cava abdominalis under chloroform anaesthesia and the pulmonary airway tissue was extracted immediately.

The extracted lung was perfused with a buffer (1) (50 mM Tris-HCl, pH 7.4), thinly cut in the buffer, and then homogenised in a buffer (2) [buffer (1) containing 120 mM sodium chloride and 5 mM potassium chloride] using a Polytron homogenizer. The tissue mass was removed from the homogenate by filtration with a nylon mesh (50 μ m) and the supernatant was centrifuged (30,000 xg, 30 minutes, 4°C). The resultant pellet was resuspended in an ice-cooled buffer (3) [buffer (1) containing 10 mM EDTA and 300 mM potassium chloride], allowed to stand at 4°C for 60 minutes and then washed centrifugally twice (30,000 xg, 15 minutes, 4°C).

The crude membrane fraction was preserved at -80°C before use.

(b) Receptor binding test

To a mixed solution (250 μ l) of the test drug and [³H]-substance P (final concentration: 1 nM) (50 mM Tris-HCl, pH 7.4; 6 mM manganese chloride, 800 μ g/ml BSA, 8 μ g/ml chymostatin, 8 μ g/ml leupeptin, 80 μ g/ml bacitracin, 20 μ g/ml phosphoramidon) was added a crude lung membrane fraction solution (250 μ l), followed by incubation at room temperature for 30 minutes.

At the end of this time, a lung membrane ingredient was recovered on a GF/B glass fiber filter (manufactured by Whatman Co.) using an automatic filtering device (manufactured by Brandel Co.).

The glass filter was used after being pre-treated with a 0.1% polyethyleneimine solution for about 4 hours so as to inhibit non-specific binding as little as possible. The membrane ingredient-recovered filter was transferred to a mini-plastic vial containing a pico flow (4 ml) and the radioactivity was measured using a liquid scintillation counter (LSC3000, manufactured by Beckman Co.).

The results are shown in Table 4:

Table 4

Test Compound	IC ₅₀ (ng/ml)
Compound of Example 75	5.9
Compound A	38
Compound B	>1000
Compound C	6.5

As can be seen from the above results, the compound of the present invention exhibited an activity against NK₁ receptors which is at least equal to that of Compound C, which exhibited the strongest activity of the closest compounds

of the prior art.

NK₂ receptor binding test

(a) Preparation of crude ileum membrane fraction

A crude membrane fraction was prepared from the ileum of male Hartley guinea pigs. The guinea pigs were bled from the cava abdominalis under chloroform anaesthesia and the ileum was extracted immediately.

After the contents, secreta and epithelium of the lumen had been scraped off using a glass slide, the extracted ileum was thinly cut in a buffer (1) (50 mM Tris-HCl, pH 7.4) and then homogenised in a buffer (2) [buffer (1) containing 120 mM sodium chloride and 5 mM potassium chloride] using a Polytron homogenizer.

The tissue mass was removed from the homogenate by filtration with a nylon mesh (50 μ m) and the supernatant was centrifuged (30,000 xg, 30 minutes, 4°C). The resultant pellet was resuspended in an ice-cooled buffer (3) [buffer (1) containing 10 mM EDTA and 30 mM potassium chloride], allowed to stand at 4°C for 60 minutes and then washed centrifugally twice (30,000 xg, 15 minutes, 4°C).

The crude membrane fraction was preserved at -80°C before use.

(b) Receptor binding test

To a mixed solution (250 μ l) of the test drug and [³H]-SR-48968 (manufactured by Amasham Co., final concentration: 1 nM) (50 mM Tris-HCl, pH 7.4; 4.6 mM manganese chloride, 800 μ g/ml BSA, 8 μ g/ml chymostatin, 8 μ g/ml leupeptin, 80 μ g/ml bacitracin, 20 μ g/ml phosphoramidon) was added a crude ileum membrane fraction solution (250 μ l), followed by incubation at room temperature for 30 minutes.

At the end of this time, a membrane ingredient was recovered on a GF/B glass fiber filter (manufactured by Whatman Co.) using an automatic filtering device (manufactured by Brandel Co.). The glass filter was used after pretreatment with a 0.1% polyethyleneimine solution for about 4 hours so as to inhibit non-specific binding as little as possible.

The membrane ingredient-recovered filter was transferred to a mini-plastic vial containing a pico flow (4 ml) and the radioactivity was measured using a liquid scintillation counter (LSC3000, manufactured by Beckman Co.).

The compound of the present invention showed a good activity to NK₁ and NK₂ receptors in comparison with the compounds of the prior art.

The results are shown in Table 5:

Table 5

Test Compound	IC ₅₀ (ng/ml)
Compound of Example 75	0.85
Compound A	18
Compound B	2.2
Compound C	31

As can be seen from the above results, the compound of the present invention exhibited an activity against NK₂ receptors which is greater than that of any of the closest compounds of the prior art. Moreover, Compound C, which exhibited the strongest activity in the NK₁ binding test, here exhibited very weak activity.

Inhibitory Effect on SP-Induced Increased Vascular Permeability

The inhibitory effect on increased vascular permeability induced by substance P (SP), an NK₁ receptor agonist, was assessed based on the amount of pigment leakage as an index using guinea pigs (body weight: approx. 400 g, male Hartley guinea pigs). Immediately after administering pigment (Evans blue: 20 mg/kg, i.v.) and the test drug in that order into the femoral vein of the guinea pigs under pentobarbital anaesthesia (25 mg/kg, i.p.), increased vascular permeability was induced by administration of SP (1 mg/kg, i.v.). Fifteen minutes later, the guinea pigs were sacrificed by chloroform anaesthesia and the amount of pigment that leaked into the primary bronchus was measured according to the method of Harada (J. Pharm. Pharmacol., 23, 218, 1971). Inhibitory effect was determined based on the amount of pigment leakage found in guinea pigs not treated with the test drug, and expressed as the percent of inhibition (%) and the dose level that caused inhibition of 50% (ID₅₀).

The results are shown in Table 6:

Table 6

Test Compound	ID ₅₀ (mg/kg, i.v.)
Compound of Example 75	0.025
Compound of Example 77	0.047
Compound A	5.8
Compound B	>10
Compound C	0.019

As can be seen from the above results, the compounds of the present invention exhibited an inhibitory effect on Substance P-induced increased vascular permeability which is at least equal to that of Compound C, which exhibited the strongest activity of the closest compounds of the prior art.

Inhibitory Effect on NKA-Induced Bronchoconstriction

The inhibitory effect on bronchoconstriction induced with [Nle¹⁰]-NKA[4-10], an NK₂ receptor agonist having higher specificity than neurokinin A (NKA), was assessed based on airway pressure as an index according to the modified method of Konzett-Rössler [Naunyn-Schmiedeberg's Arch. Exp. Pathol. Pharmacol., 195, 71, (1940)] using guinea pigs (body weight: approximately 500g, male Hartley guinea pigs).

After cannulating the trachea of the guinea pigs under pentobarbital anaesthesia (30 mg/kg, s.c.) and treatment with gallamine (20 mg/kg, i.v.), the animals were ventilated artificially with a constant volume respiration pump (UgoBasile, 7025) at a frequency of 60 per minute and a tidal volume of 8 ml/kg. Airway pressure during artificial respiration was amplified by means of a pressure transducer (Nihon Koden, TP-200T) installed in a branch of the trachea cannula, detected (Nihon Koden, AP-610G), and recorded with a recorder (Nihon Koden, WT-685G). Following pre-treatment with atropine (1 mg/kg, i.v.) and propranolol (1 mg/kg, i.v.), the test drug was administered intravenously. Five minutes later, bronchoconstriction was induced with [Nle¹⁰]-NKA[4-10] at 4 mg/kg, i.v., and then airway pressure was measured for 10 minutes. The inhibitory effect was determined based on the intensity of bronchoconstriction of guinea pigs not treated with the test drug, and expressed as the percent of inhibition (%) and the dose level that caused inhibition of 50% (ID₅₀).

The results are shown in Table 7:

Table 7

Test Compound	ID ₅₀ (mg/kg, i.v.)
Compound of Example 75	0.074
Compound of Example 77	0.047
Compound A	>10
Compound B	0.37
Compound C	1.7

As can be seen from the above results, the compounds of the present invention exhibited an activity against NK₂ receptors which is greater than that of any of the closest compounds of the prior art.

It is apparent from the above data that the compounds of the present invention exhibited strong activity against both NK₁ and NK₂ receptors. Moreover, the compounds of the present invention have an activity against the NK₁ receptors which is at least equal to that of the closest prior art compounds, and has a stronger activity against the NK₂ receptors than that of the closest prior art compounds.

The preparation of compounds of the present invention is further illustrated by the following Examples. Preparation of certain of the starting materials used in these Examples is illustrated by the following Preparations.

PREPARATION 1N,N-Dimethyl-1-t-butoxycarbonyl-4-phenylpiperidine-4-carboxamide

1.0 g (3.27 mmole) of t-butoxycarbonyl-4-phenylpiperidine-4-carboxylic acid was dissolved in 20 ml of anhydrous methylene chloride, and 690 mg (3.6 mmole) of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride, 490 mg (3.6 mmole) of 1-hydroxybenzotriazole, 1.3 ml (7.53 mmole) of diisopropylethylamine and 295 mg (3.93 mmole) of dimethylamine hydrochloride were added to the resulting solution, which was then stirred under a nitrogen atmosphere at room temperature for 15 hours. At the end of this time, the reaction mixture was diluted with methylene chloride, washed with water and with a saturated aqueous solution of sodium chloride, in that order, and then dried over anhydrous sodium sulphate.

The solvent was then removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography using a gradient elution method, with mixtures of ethyl acetate and hexane ranging from 10 : 1 to 7 : 1 by volume as the eluent, to give 925 mg (yield 85%) of the title compound as white crystals.

Nuclear Magnetic Resonance Spectrum (400MHz, CDCl_3) δ ppm:

7.34 (2H, doublet of triplets, $J=6.7$ & 1.9 Hz);
 7.26 - 7.21 (3H, multiplet);
 3.96 (2H, broad singlet);
 3.21 (2H, broad singlet);
 2.85 (3H, broad singlet);
 2.60 (3H, broad singlet);
 2.31 (2H, doublet, $J = 12.05$ Hz);
 1.87 (2H, broad singlet);
 1.45 (9H, singlet).

Mass spectrometric analysis (EI) m/z: 332 (M^+).

"EI" represents "Electron Ionization"

PREPARATION 2N,N-Dimethyl-4-phenylpiperidine-4-carboxamide hydrochloride

900 mg (2.7 mmole) of N,N-dimethyl-1-t-butoxycarbonyl-4-phenylpiperidine-4-carboxamide (prepared as described in Preparation 1) were dissolved in 10 ml of ethyl acetate, and 5 ml of a 4 N solution of hydrogen chloride in dioxane were added, whilst ice-cooling. The mixture was then stirred at 0°C for 1 hour. At the end of this time, the crystals which had deposited were collected by filtration, to give 690 mg (yield 95%) of the title compound as white crystals. Nuclear Magnetic Resonance Spectrum (400 MHz, hexadeuterated dimethyl sulphoxide) δ ppm:

9.02 (1H, broad singlet);
 7.43 (2H, triplet, $J = 7.6$ Hz);
 7.31 (1H, doublet, $J = 7.2$ Hz);
 7.23 (2H, doublet, $J = 7.1$ Hz);
 3.25 (2H, doublet, $J = 13.1$ Hz);
 3.03 (2H, triplet, $J = 12.1$ Hz);
 2.79 (3H, broad singlet);
 2.54 (3H, broad singlet);
 2.37 (2H, doublet, $J = 12.9$ Hz);
 2.11 (2H, doublet of triplets, $J = 13.4$ & 3.3 Hz).

Mass spectrometric analysis (EI) m/z: 232 (free form, M^+)

PREPARATION 3Spiro[benzo[c]thiophene-1(3H),4'-piperidine]hydrochloride3(a) 1'-Cyanospiro[benzo[c]thiophene-1(3H),4'-piperidine]

2.34 g (22.1 mmole) of bromine cyanide were dissolved in 20 ml of anhydrous chloroform, and an anhydrous chlo-

roform solution of 2.2 g (10 mmole) of 1'-methylspiro[benzo[c]thiophene-1(3H),4'-piperidine][synthesised according to the process described in J. Org. Chem., Vol. 41, page 2628 (1976)] was added dropwise under reflux under a nitrogen atmosphere over a period of 20 minutes. The mixture was then heated under reflux for 9 hours, after which the reaction mixture was cooled and poured into ice-cooled aqueous 1 N aqueous hydrochloric acid. The chloroform layer was then separated, washed with water and dried over anhydrous sodium sulphate.

The solvent was then removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a 1 : 9 by volume mixture of ethyl acetate and hexane as the eluent, to obtain 1.3 g (yield 56%) of the title compound as white crystals.

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl₃) δ ppm:

7.38 - 7.27 (3H, multiplet);
7.21 (1H, doublet of doublets, J = 1.9 & 6.4 Hz);
4.20 (2H, singlet);
3.51 (2H, multiplet);
3.37 (2H, doublet of triplets, J = 2.2 & 12.9 Hz);
2.29 (2H, doublet of triplets, J = 4.6 & 12.9 Hz);
1.91 (2H, multiplet).

Mass spectrometric analysis (FAB) m/z: 231 (M+H)⁺

FAB is "Fast Atom Bombardment"

3(b) 1'-t-Butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine]

1.3 g (5.64 mmole) of 1'-cyanospiro[benzo[c]thiophene-1(3H),4'-piperidine] [prepared as described in step (a) above] were dissolved in 20% w/v aqueous hydrochloric acid, and the solution was heated under reflux for 20 hours. At the end of this time, the reaction mixture was cooled and washed with ethyl acetate. The aqueous layer was separated and made basic by the addition of a 10% w/v aqueous solution of sodium hydroxide; it was then extracted three times with chloroform. The solvent was then removed from the combined extracts by distillation under reduced pressure, and the resulting residue was dissolved in anhydrous methylene chloride. 1.15 ml (8.18 mmole) of triethylamine were then added, and 1.45 g (6.64 mmole) of di-t-butyl dicarbonate were added, whilst ice-cooling. The mixture was then stirred at room temperature for 2 hours. At the end of this time, the reaction mixture was diluted with methylene chloride and washed, in turn, with water and with a saturated aqueous solution of sodium chloride. The organic layer was separated and dried over anhydrous sodium sulphate, after which the solvent was removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a 3 : 97 by volume mixture of ethyl acetate and hexane as the eluent, to obtain 1.65 g (yield 96%) of the title compound as white crystals.

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl₃) δ ppm:

7.28 - 7.24 (3H, multiplet);
7.17 - 7.15 (1H, multiplet);
4.23 (2H, broad singlet);
4.19 (2H, singlet);
3.02 (2H, broad singlet);
2.07 (2H, doublet of triplets, J = 4.4 & 13 Hz);
1.88 (2H, multiplet);
1.49 (9H, singlet).

Mass spectrometric analysis (EI) m/z: 305 (M⁺)

3(c) Spiro[benzo[c]thiophene-1(3H),4'-piperidine] hydrochloride

150 mg (0.49 mmole) of 1'-t-butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine] [prepared as described in step (b) above] were dissolved in 3 ml of anhydrous methylene chloride, and 1 ml of a 4 N solution of hydrogen chloride in dioxane was added. The mixture was then stirred at room temperature for 1 hour. At the end of this time, the crystals which deposited were collected by filtration, to give 108 mg (yield 91%) of the title compound as white crystals.

Nuclear Magnetic Resonance Spectrum (400 MHz, hexadeuterated dimethyl sulphoxide) δ ppm:

9.77 (2H, broad singlet);
7.37 - 7.25 (4H, multiplet);
4.24 (2H, singlet);

3.67 (2H, doublet, J = 12.6 Hz);
 3.26 (2H, doublet of triplets, J = 12.6 & 2.5 Hz);
 2.74 (2H, doublet of triplets, J = 3.8 & 14.0 Hz);
 2.09 (2H, doublet, J = 14.0 Hz).

5

Mass spectrometric analysis (FAB) m/z: 206 (M+H)⁺ (free form)

PREPARATION 4

10 Spiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide hydrochloride

4(a) 1'-t-Butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide

485 mg (1.59 mmole) of 1'-t-butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine] [prepared as described in
 15 Preparation 3(b)] were dissolved in 5 ml of anhydrous methylene chloride, and 148 mg (1.76 mmole) of sodium hydro-
 gencarbonate were added, followed by 325 mg (1.88 mmole, content: 85%) of m-chloroperbenzoic acid, whilst ice-cool-
 ing. The reaction mixture was stirred, whilst ice-cooling, for 30 minutes, after which it was diluted with methylene
 chloride and then washed, in turn, with water and with a saturated aqueous solution of sodium chloride. The solution
 was dried over anhydrous sodium sulphate, and then the solvent was removed by distillation under reduced pressure,
 20 and the resulting residue was purified by thin-layer chromatography, using a 2 : 1 by volume mixture of ethyl acetate and
 hexane as the developing solvent, to give 498 mg (yield 98%) of the title compound as white crystals.
 Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl₃) δ ppm:

7.37 - 7.32 (3H, multiplet);
 25 7.25 - 7.23 (1H, multiplet);
 4.37 (1H, doublet, J = 16.7 Hz);
 4.13 (2H, broad singlet);
 4.05 (2H, doublet, J = 16.7 Hz);
 3.21 (2H, broad singlet);
 30 2.43 (1H, multiplet);
 2.21 (1H, multiplet);
 1.70 (1H, multiplet);
 1.61 (1H, multiplet);
 1.50 (9H, singlet).

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Mass spectrometric analysis (FAB) m/z: 322 (M+H)⁺

4(b) Spiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide hydrochloride

40 295 mg (0.92 mmole) of 1'-t-butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide [prepared as
 described in step (a) above] were dissolved in 3 ml of methylene chloride, and 1 ml of a 4 N solution of hydrogen chlo-
 ride in dioxane was added, whilst ice-cooling. The mixture was stirred, whilst ice-cooling, for 1 hour, and then the crys-
 tals which deposited were collected by filtration, to give 173 mg (yield 75%) of the title compound as white crystals.
 Nuclear Magnetic Resonance Spectrum (400 MHz, hexadeuterated dimethyl sulphoxide) δ ppm:

45

9.13 (2H, broad singlet);
 7.44 - 7.36 (3H, multiplet);
 7.33 - 7.31 (1H, multiplet);
 4.66 (1H, doublet, J = 17 Hz);
 50 4.08 (1H, doublet, J = 17 Hz);
 3.49 - 3.37 (2H, multiplet);
 3.15 - 3.00 (2H, multiplet);
 2.66 - 2.57 (1H, multiplet);
 2.27 - 2.23 (1H, multiplet);
 55 2.18 - 2.10 (1H, multiplet);
 1.97 - 1.93 (1H, multiplet).

Mass spectrometric analysis (FAB) m/z: 222 (M+H)⁺ (free form)

PREPARATION 5

Spiro[benzo[c]thiophene-1(3H),4'-piperidine]-2,2-dioxide hydrochloride5 5(a) 1'-t-butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine]-2,2-dioxide

190 mg (0.59 mmole) of 1'-t-butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide [prepared as described in Preparation 4(a)] were dissolved in 30 ml of methanol, and 10 ml of an aqueous solution containing 270 mg (1.77 mmole) of Oxone (trade mark) were added. The reaction mixture was stirred at room temperature for 5 days, after which it was poured into water and then extracted twice with chloroform. The organic extract was separated and then dried over anhydrous sodium sulphate, after which the solvent was removed by distillation under reduced pressure. The resulting residue was purified by thin-layer chromatography, using a 1 : 1 by volume mixture of ethyl acetate and hexane as the developing solvent, to give 175 mg (yield 88%) of the title compound as white crystals.

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl₃) δ ppm:

7.52 - 7.27 (3H, multiplet);
 7.23 - 7.20 (1H, multiplet);
 4.36 (2H, singlet);
 4.10 (2H, broad singlet);
 3.44 (2H, broad singlet);
 2.38 (2H, multiplet);
 2.00 (2H, multiplet);
 1.50 (9H, singlet).

Mass spectrometric analysis (FAB) m/z: 337 (M⁺)

5(b) Spiro[benzo[c]thiophene-1(3H),4'-piperidine]-2,2-dioxide hydrochloride

170 mg (0.5 mmole) of 1'-t-butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine]-2,2-dioxide [prepared as described in step (a) above] were dissolved in 3 ml of methylene chloride, and 1 ml of a 4 N solution of hydrogen chloride in dioxane was added, whilst ice-cooling. The mixture was then stirred, whilst ice-cooling, for 1 hour, after which the crystals which deposited were collected by filtration, to give 131 mg (yield 95%) of the title compound as white crystals.

Nuclear Magnetic Resonance Spectrum (400 MHz, hexadeuterated dimethyl sulfoxide) δ ppm:

9.32 (2H, broad singlet)
 7.51 - 7.35 (4H, multiplet).
 4.74 (2H, singlet).
 3.45 - 3.67 (2H, multiplet).
 3.24 - 3.12 (2H, multiplet).
 2.47 - 2.43 (4H, multiplet).

Mass spectrometric analysis (FAB) m/z: 238 (M+H)⁺ (free form)

PREPARATION 6

Spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide hydrochloride6(a) 1'-t-Butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine]

81.0 g (0.40 mole) of 2-bromobenzylthiol were dissolved in 800 ml of tetrahydrofuran, and 516 ml of a solution containing 0.84 mole of butyllithium (as a 1.6 M solution in hexane) were added dropwise thereto over a period of 6 hours at a temperature of -78°C. The mixture was then stirred for 1.5 hours at the same temperature, after which 800 ml of a tetrahydrofuran solution containing 79.5 g (0.40 mole) of 1-t-butoxycarbonyl-4-piperidone was added dropwise thereto over a period of 3 hours. The solution was then stirred for a further 1 hour, and then a saturated aqueous solution of ammonium chloride was added, and the mixture was extracted with ethyl acetate. The organic extract was washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous sodium sulphate. The solvent was then removed by distillation under reduced pressure. 2 litres of 4 N aqueous sulphuric acid were added to the residue, and then the mixture was heated under reflux for 14 hours. At the end of this time, the solution was made basic by the addition of 350 g (8.75 mole) of sodium hydroxide, whilst ice-cooling, and then 102 g (0.47 mole) of di-t-butyl dicarbonate

were added thereto. The mixture was then stirred for 1 hour. At the end of this time, the product was extracted with methylene chloride, and the organic extract was washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a 97 : 3 by volume mixture of hexane and ethyl acetate as the eluent, to give 56 g of the title compound as white crystals, melting at 131.0 - 132.5°C (after crystallisation from hexane/ethyl acetate).

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.28 - 7.24 (3H, multiplet);
7.17 - 7.15 (1H, multiplet);
4.23 (2H, broad singlet);
4.19 (2H, singlet);
3.02 (2H, broad singlet);
2.07 (2H, doublet of triplets, $J = 4.4$ & 13 Hz);
1.88 (2H, multiplet);
1.49 (9H, singlet).

Infrared absorption spectrum ν_{max} cm^{-1} (KBr): 2970, 1680, 1428, 1234, 1163.

Mass spectrometric analysis (FAB) m/z : 306 ($M + H$)⁺

6(b) 1'-t-Butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide

42.0 g (0.14 mole) of 1'-t-butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine] [prepared as described in step (a) above] were dissolved in 420 ml of chloroform, and 12.7 g (0.15 mole) of sodium hydrogencarbonate were added thereto. 28.0 g (0.14 mole) of *m*-chloroperbenzoic acid (purity 85%) were then added little by little, whilst ice-cooling. The mixture was then stirred for 30 minutes, whilst ice-cooling, after which 10 g of potassium iodide were added, and the mixture was stirred for a further 30 minutes at room temperature. The reaction mixture was washed with water and then with a saturated aqueous solution of sodium chloride and dried over anhydrous magnesium sulphate. At the end of this time, the solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a 1 : 1 by volume mixture of hexane and ethyl acetate as the eluent, to give 42 g of the title compound as white crystals, melting at 103 - 107 °C (after crystallisation from diisopropyl ether). Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.37 - 7.32 (3H, multiplet);
7.25 - 7.23 (1H, multiplet);
4.37 (1H, doublet, $J = 16.7$ Hz);
4.13 (2H, broad singlet);
4.05 (2H, doublet, $J = 16.7$ Hz);
3.21 (2H, broad singlet);
2.43 (1H, multiplet);
2.21 (1H, multiplet);
1.70 (1H, multiplet);
1.61 (1H, multiplet);
1.50 (9H, singlet).

Infrared absorption spectrum ν_{max} cm^{-1} (KBr):
2985, 1686, 1429, 1368, 1286, 1167.

Mass spectrometric analysis (FAB) m/z : 322 ($M + H$)⁺

6(c) Spiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide

42.0 g (0.13 mole) of 1'-t-butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide [prepared as described in step (b) above] were dissolved in 420 ml of 2-propanol, and 150 ml of a 4 N solution of hydrogen chloride in dioxane was added thereto, whilst ice-cooling. The mixture was then stirred for 4 hours. At the end of this time, 200 ml of diethyl ether were added to the mixture, and the mixture was allowed to stand for 1 hour, whilst ice-cooling. The precipitated crystals were then collected by filtration. The crystals were dissolved in 200 ml of a 5% w/v aqueous solution of sodium hydroxide. The product was extracted with methylene chloride, and the organic extract was dried over anhydrous sodium sulphate. The solvent was then removed by distillation under reduced pressure, to give 21.7 g of the title compound as a white amorphous product.

6(d) Spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide (S)-(+)-mandelate

33.51 g (0.15 mole) of spiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide [prepared as described in step (c) above] were dissolved in 3350 ml of acetonitrile whilst heating, and then 11.52 g (75.7 mmole) of (S)-(+)-mandelic acid was dissolved in the resulting solution. The mixture was allowed to stand overnight at room temperature, and the crystals which precipitated were collected by filtration to give 19.62 g of the title compound as white crystals. The mother liquor was concentrated by evaporation under reduced pressure, and the resulting residue was dissolved in a 5% w/v aqueous solution of sodium hydroxide; it was then extracted with methylene chloride. The organic extract was dried over anhydrous sodium sulphate, and the solvent was removed by distillation under reduced pressure, to give 22.01 g (99.5 mmole) of a residue. This residue was dissolved in 2200 ml of acetonitrile with heating, and then 7.22 g (47.5 mmole) of (R)-(-)-mandelic acid were dissolved therein. The mixture was allowed to stand overnight at room temperature, and the crystals which precipitated were collected by filtration to give 15.91 g of spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2R)-oxide (R)-(-)-mandelate as white crystals. The mother liquor was concentrated by evaporation under reduced pressure, and the resulting residue was dissolved in a 5% w/v aqueous solution of sodium hydroxide and extracted with methylene chloride. The organic extract was dried over anhydrous sodium sulphate, and the solvent was removed by distillation under reduced pressure, to give 11.51 g (52.0 mmole) of a residue. This residue was dissolved in 1100 ml of acetonitrile with heating, and then 3.95 g (26.0 mmole) of (S)-(+)-mandelic acid were dissolved therein. The mixture was allowed to stand overnight at room temperature. The crystals which precipitated were collected by filtration to give 4.73 g of the title compound as white crystals.

The whole of the title compound thus obtained was combined, and 24.00 g of the compound were dissolved again in 9.6 litres of acetonitrile with heating and the solution was allowed to stand overnight at room temperature. 20.13 g of precipitated crystals, melting at 197 - 200 °C, were obtained. This product was converted into 1'-t-butoxycarbonyl-spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide, and HPLC (High Performance Liquid Chromatography) analysis indicated that its optical purity is 99.8% ee.

$[\alpha]_D^{24} + 78.3$ (c = 1, methanol)

Infrared absorption spectrum ν_{max} cm⁻¹ (KBr): 3388, 3029, 1629, 1332, 1017.

Mass spectrometric analysis(EI) m/z: 221 (free form, M⁺)

6(e) 1'-t-Butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide

19.88 g (53.2 mmole) of spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide (S)-(+)-mandelate [prepared as described in step (d) above] were dissolved in 200 ml of a 5% w/v aqueous solution of sodium hydroxide and extracted three times, each time with 200 ml of methylene chloride. The combined organic extracts were dried over anhydrous magnesium sulphate, and then the solvent was removed by distillation under reduced pressure. 11.80 g of the resulting residue were dissolved in 300 ml of methylene chloride, and 11.2 ml (79.8 mmole) of triethylamine and 17.4 g (79.8 mmole) of di-*t*-butyl dicarbonate were added to the resulting solution, in that order, whilst ice-cooling. The mixture was then stirred overnight at room temperature. At the end of this time, the reaction mixture was diluted with 200 ml of methylene chloride and washed with a 10% w/v aqueous solution of citric acid and then with a saturated aqueous solution of sodium hydrogencarbonate. It was then dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 4 : 6 to 3 : 7 by volume as the eluent; it was then recrystallized from diisopropyl ether, to give 13.1 g of the title compound as white crystals, melting at 129.0 - 130.5 °C.

$[\alpha]_D^{24} + 57.1$ (c = 1, methanol)

HPLC analysis

Column: ChiralCel OD (250 x 4.6 mmØ)

Eluent: hexane:2-propanol = 80 : 20 by volume

Flow rate: 0.8 ml/minute

Retention time: 18.1 minute

The Nuclear Magnetic Resonance spectrum, Infrared absorption spectrum and Mass spectrometric analysis of this isomer agreed with those of the racemate produced as described in Preparation 6(b).

6(f) Spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide hydrochloride

13.0 g (40.4 mmole) of 1'-t-butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide [prepared as described in step (e) above] were dissolved in 130 ml of 2-propanol, and 50 ml of a 4 N solution of hydrogen chloride in dioxane were added thereto, whilst ice-cooling. The mixture was stirred for 1 hour at the same temperature, after

which it was stirred for a further 6 hours at room temperature. The reaction mixture was then concentrated by evaporation under reduced pressure. 200 ml of diethyl ether were then added to the residue, and the solvent was removed by distillation under reduced pressure; this procedure was repeated 3 times in all. The resulting residue was recrystallized from 300 ml of a 1 : 2 by volume mixture of methanol and diethyl ether, to give 9.10 g of the title compound as white

crystals, melting at 209.5 - 210.5°C.

$[\alpha]_D^{24} +63.8$ (c = 1, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CD₃OD) δ ppm:

7.38 - 7.46 (4H, multiplet);

4.69 (1H, doublet, J = 17.2 Hz);

4.17 (1H, doublet, J = 17.2 Hz);

3.52 - 3.63 (2H, multiplet);

3.25 - 3.40 (2H, multiplet);

2.62 (1H, multiplet);

2.51 (1H, multiplet);

2.22 (1H, multiplet);

2.06 (1H, multiplet).

6(g) 1'-t-Butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine]-2(S)-oxide

250 mg (0.82 mmole) of 1'-t-butoxycarbonylspiro[benzo[c]thiophene-1(3H),4'-piperidine] were dissolved in 5 ml of methylene chloride, and 308 mg (0.82 mmol) of (3'S,2R)-(-)-N-(phenylsulphonyl)(3,3-dichlorocamphoryl)oxaziridine synthesized according to the method of F.A. Davis et al. [J. Am. Chem. Soc., 114, 1428 (1992)] were added to the resulting solution. The resulting mixture was then stirred overnight at room temperature. At the end of this time, 500 mg of potassium iodide were added to the mixture, and the mixture was stirred for 30 minutes. It was then washed with water and with a saturated aqueous solution of sodium chloride and dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the residue was purified by silica gel column chromatography, using a 1 : 2 by volume mixture of hexane and ethyl acetate as the eluent, to give 245 mg of the title compound.

Optical purity: 94% ee

PREPARATION 7

3-(3,4-Dichlorophenyl)-3-butenol 1-butyldimethylsilyl ether

7(a) 3-(3,4-Dichlorophenyl)-3-oxo-1-propanol

119 g (0.46 mole) of ethyl 3-(3,4-dichlorophenyl)-3-oxopropionate were dissolved in 2.4 litres of ethanol, and 115 ml (0.68 mole) of ethyl orthoformate and 4.4 g (22.8 mmole) of p-toluenesulphonic acid were added thereto. The mixture was then heated under reflux for 8 hours. At the end of this time, the reaction solution was poured into 1 litre of a saturated aqueous solution of sodium hydrogencarbonate and extracted three times, each time with 700 ml of ethyl acetate. The organic extracts were combined, washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous sodium sulphate. The solvent was then removed by distillation under reduced pressure, and the resulting residue was dissolved in 800 ml of tetrahydrofuran and then added dropwise to 4 litres of a suspension of 25.9 g (0.68 mole) of lithium aluminium hydride in tetrahydrofuran over a period of 1 hour, whilst ice-cooling. The mixture was stirred at 0°C for 2 hours, and then 250 ml of water and 125 ml of a 10% w/v aqueous solution of sodium hydroxide were added thereto, and the mixture was stirred for a further 1 hour at room temperature. It was then filtered through a Celite (trade mark) filter aid, and the filtrate was poured into 1 litre of a saturated aqueous solution of sodium chloride and then extracted with ethyl acetate. The organic extract was dried over anhydrous sodium sulphate and concentrated by evaporation under reduced pressure. The resulting residue was dissolved in 500 ml of chloroform. 500 ml of 50% v/v aqueous trifluoroacetic acid were added to the resulting solution over a period of 30 minutes, whilst ice-cooling, and the mixture was stirred for a further 30 minutes at the same temperature. At the end of this time, the reaction solution was diluted with 300 ml of methylene chloride, and the organic layer was washed with water and then with a saturated aqueous solution of sodium hydrogencarbonate, after which it was dried over anhydrous sodium sulphate. The solvent was then removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a 9 : 1 by volume mixture of hexane and ethyl acetate as the eluent, to give 46 g of the title compound as white crystals.

Nuclear Magnetic Resonance Spectrum (270 MHz, CDCl₃) δ ppm:

8.05 (1H, doublet, J = 2.0 Hz);

7.79 (1H, doublet of doublets, J = 2.0 & 8.1 Hz);
 7.57 (1H, doublet, J = 8.1 Hz);
 4.04 (2H, multiplet);
 3.19 (2H, triplet, J = 5.3 Hz);
 2.44 (1H, triplet, J = 6.6 Hz, which disappeared on the addition of D₂O).

7(b) 3-(3,4-Dichlorophenyl)-3-oxo-1-propanol t-butyldimethylsilyl ether

46.0 g (0.21 mole) of 3-(3,4-dichlorophenyl)-3-oxo-1-propanol [prepared as described in step (a) above] were dissolved in 460 ml of dimethylformamide, and 35 ml (0.25 mole) of triethylamine and 38.0 g (0.25 mole) of t-butyldimethylchlorosilane were added to the resulting solution. The mixture was then stirred for 2 hours at 0 °C. At the end of this time, the reaction mixture was poured into water and extracted with ethyl acetate. The organic extract was washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a 96 : 4 by volume mixture of hexane and ethyl acetate as the eluent, to give 66.1 g of the title compound as white crystals.

Nuclear Magnetic Resonance Spectrum (270 MHz, CDCl₃) δ ppm:

8.06 (1H, doublet, J = 2.0 Hz);
 7.80 (1H, doublet of doublets, J = 2.0 & 8.3 Hz);
 7.55 (1H, doublet, J = 8.3 Hz);
 4.04 (2H, triplet, J = 6.3 Hz);
 3.13 (2H, triplet, J = 6.3 Hz);
 0.85 (9H, singlet);
 0.04 (6H, singlet).

7(c) 3-(3,4-Dichlorophenyl)-3-butenol t-butyldimethylsilyl ether

215 g (0.60 mole) of methyltriphenylphosphonium bromide and 54 g (0.48 mole) of potassium t-butoxide were added to 2 litres of dried benzene, and the mixture was stirred for 9 hours at room temperature. At the end of this time, 40 g (0.12 mole) of 3-(3,4-dichlorophenyl)-3-oxo-1-propanol t-butyldimethylsilyl ether [prepared as described in step (b) above] were dissolved in 800 ml of benzene and the resulting solution was slowly added dropwise to the mixture over a period of 2.5 hours. 1 litre of water was then added to the reaction mixture, and the mixture was stirred for 30 minutes, whilst ice-cooling. The organic layer was separated, and then washed with water and with a saturated aqueous solution of sodium chloride, after which it was dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using hexane as the eluent, to give 23.5 g of the title compound. The physicochemical properties of this product were the same as those of the product produced as described in Example 1(b).

PREPARATION 8

3-(3,4-Dichlorophenyl)-3-butenol t-butyldimethylsilyl ether

129 mg (5.31 mmole) of magnesium flakes were added to 2 ml of diethyl ether, and a small amount of iodine was added to the mixture. 1 ml of a diethyl ether solution containing 1.01 g (4.47 mmole) of 3,4-dichlorobromobenzene was then added dropwise to the mixture, and the mixture was stirred for 1 hour at room temperature under a nitrogen atmosphere to give a Grignard reagent.

500 mg (1.60 mmole) of 3-iodo-3-butenol t-butyldimethylsilyl ether and 34 mg (0.048 mmole) of dichlorobis(triphenylphosphine)palladium (II) were dissolved in 5 ml of anhydrous tetrahydrofuran, and the previously prepared Grignard reagent was added dropwise thereto at room temperature under a nitrogen atmosphere. While the reaction temperature was raised, the diethyl ether was distilled off, and then the reaction mixture was heated at 60°C for 1 hour. At the end of this time, the reaction mixture was poured into an aqueous solution of ammonium chloride and extracted with ethyl acetate. The organic layer was washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using hexane as the eluent, to give 422 mg of the title compound. The physicochemical properties of this product were the same as those of the product produced as described in Example 1(b).

EXAMPLE 11-[2-[(5R)-(3,4-Dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-phenylpiperidine-4-carboxamide5 1(a) Methyl 3-(3,4-dichlorophenyl)-3-butenate

11.31 g (0.47 mole) of magnesium flakes were added to 300 ml of diethyl ether, followed by a small amount of iodine. The mixture was then allowed to stand for 1 hour, after which a solution of 102.87 g (0.46 mole) of 1-bromo-3,4-dichlorobenzene in 150 ml of diethyl ether was slowly added dropwise. A further 150 ml of diethyl ether was added, and then 60.33 g (44.3 mmole) of anhydrous zinc chloride was slowly added and the mixture was stirred for 1 hour. 3.10 g (4.42 mmole) of dichlorobis(triphenylphosphine)palladium (II) were then added, and a solution of 34.15 ml (42.8 mmole) of diketene in 600 ml of diethyl ether was added dropwise. The reaction mixture was then stirred at room temperature for 30 minutes, after which it was poured into 1 litre of ice-cooled 1 N aqueous hydrochloric acid and extracted three times, each time with 500 ml of diethyl ether. The combined organic extracts were extracted three times, each time with 500 ml of diethyl ether, and then the combined organic extracts were dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was dissolved in 350 ml of methanol. 10 ml of concentrated aqueous sulphuric acid were added, and the solution was heated under reflux for 30 minutes. At the end of this time, the reaction mixture was cooled in air and neutralised with a saturated aqueous solution of sodium hydrogencarbonate. The methanol was then removed by distillation under reduced pressure, and the resulting residue was extracted with three times, each time with 200 ml of methylene chloride. The combined organic extracts were dried over anhydrous magnesium sulphate, and then the solvent was removed by distillation under reduced pressure. The resulting residue was distilled under reduced pressure to obtain 69.13 g (yield 62%) of the title compound as a pale yellow oil, boiling at 144 - 146°C (5 mm Hg).

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl₃) δ ppm:

7.51 (1H, doublet, J = 2.2 Hz);
 7.40 (1H, doublet, J = 8.2 Hz);
 7.25 (1H, doublet of doublets, J = 8.2 & 2.2 Hz);
 5.55 (1H, singlet);
 5.30 (1H, singlet);
 3.67 (3H, singlet);
 3.49 (2H, singlet).

35 1(b) 3-(3,4-Dichlorophenyl)-3-butenol t-butyl dimethylsilyl ether

11.76 g (0.28 mole) of lithium aluminium hydride were suspended in 500 ml of anhydrous tetrahydrofuran, and a solution of 69.06 g (0.28 mole) of methyl 3-(3,4-dichlorophenyl)-3-butenate [prepared as described in step (a) above] in 500 ml of anhydrous tetrahydrofuran was slowly added dropwise under a nitrogen atmosphere at 0°C over a period of 15 minutes. The reaction mixture was then stirred at the same temperature for 30 minutes, after which 500 ml of water and 500 ml of a 10% w/v aqueous solution of sodium hydroxide were slowly added. The mixture was then stirred at room temperature for 1 hour. It was then filtered through a Celite (trade mark) filter aid, and the filtrate was extracted three times, each time with 500 ml of ethyl acetate. The combined organic extracts were then dried over anhydrous magnesium sulphate. The solvent was removed from the extract by distillation under reduced pressure, and the resulting residue was dried under reduced pressure. The residue was then dissolved in 250 ml of anhydrous dimethylformamide, and then 47.12 ml (0.34 mole) of triethylamine, 6.88 g (0.06 mole) of 4-dimethylaminopyridine and 50.96 g (0.34 mole) of t-butyl dimethylsilyl chloride were added, in that order, whilst ice-cooling. The mixture was then stirred, whilst ice-cooling, for 2 hours. At the end of this time, 1 litre of ethyl acetate was added to the reaction mixture, and the mixture was washed, in turn, with ice-cooled 10% w/v aqueous hydrochloric acid and with a saturated aqueous solution of sodium chloride. It was then dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel flash column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 50 : 1 to 20 : 1 by volume as the eluent, to obtain 43.52 g (yield 47%) of the title compound as a colourless oil.

55 Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl₃) δ ppm:

7.50 (1H, doublet, J = 2.1 Hz);
 7.38 (1H, doublet, J = 8.1 Hz);
 7.24 (1H, doublet of doublets, J = 8.1 & 2.1 Hz);

5.35 (1H, singlet);
 5.16 (1H, singlet);
 3.70 (2H, triplet, J = 6.9 Hz);
 2.67 (2H, triplet, J = 6.9 Hz);
 0.86 (9H, singlet);
 0.00 (6H, singlet).

1(c) 4-t-Butyldimethylsilyloxy-(2R)-(3,4-dichlorophenyl)butane-1,2-diol

790 mg (1.01 mmole) of hydroquinidine 1,4-phthalazinediyl diether, 100.19 g (0.30 mole) of potassium ferricyanide (III), 42.06 g (0.30 mole) of potassium carbonate and 0.516 ml (0.20 mmole) of osmium tetroxide (as a 0.393 M solution in toluene) were dissolved in 500 ml of t-butanol and 500 ml of water, and 33.61 g (0.10 mole) of 3-(3,4-dichlorophenyl)-3-butenol t-butyldimethylsilyl ether [prepared as described in step (b) above] were added, whilst cooling, at 0°C. The mixture was then stirred at 0°C for 5 hours. At the end of this time, 150 g of sodium sulphite were added, and the reaction mixture was stirred at room temperature for 1 hour. It was then extracted three times, each time with 800 ml of ethyl acetate, and the combined organic extracts were dried over anhydrous magnesium sulphate. The solvent was then removed by distillation under reduced pressure, and the resulting residue was purified by silica gel flash column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 5 : 1 to 1 : 1 by volume as the eluent to obtain 32.3 g (yield 87%) of the title compound as a colourless oil of optical purity 97%ee.

$[\alpha]_D^{24} +11.39$ (c=1.01, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.57 (1H, doublet, J = 2.1 Hz);
 7.43 (1H, doublet, J = 8.1 Hz);
 7.24 (1H, doublet of doublets, J = 8.1 & 2.1 Hz);
 5.00 (1H, singlet);
 3.80 (1H, doubled doublet of doublets, J = 10.4, 3.8 & 3.8 Hz);
 3.5 - 3.7 (3H, multiplet);
 2.51 (1H, doublet of doublets, J = 8.0 & 5.2 Hz);
 2.37 (1H, doubled doublet of doublets, J = 15.0, 11.1 & 4.0 Hz);
 1.86 (1H, doubled doublet of doublets, J = 15.0, 2.9 & 2.9 Hz);
 0.89 (9H, singlet);
 0.04 (3H, singlet);
 -0.01 (3H, singlet).

1(d) 1-Azido-4-t-butyldimethylsilyloxy-(2R)-(3,4-dichlorophenyl)-2-butanol

32.07 g (87.8 mmole) of 4-t-butyldimethylsilyloxy-(2R)-(3,4-dichlorophenyl)butane-1,2-diol [prepared as described in step (c) above] and 1.07 g (8.76 mmole) of 4-dimethylaminopyridine were dissolved in 320 ml of pyridine, and 10.19 ml (0.132 mole) of methanesulphonyl chloride were slowly added dropwise, whilst ice-cooling. The mixture was then stirred under a nitrogen atmosphere at the same temperature for 2 hours. The reaction mixture was then poured into 1500 ml of ice-cooled 10% w/v aqueous hydrochloric acid and then extracted three times, each time with 200 ml of ethyl acetate. The combined organic extracts were washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was dried under reduced pressure. The residue was then dissolved in 300 ml of anhydrous dimethylformamide, and 11.41 g (0.18 mole) of sodium azide were added. The mixture was then heated under a nitrogen atmosphere at 120°C for 4 hours. At the end of this time, the reaction mixture was cooled to room temperature, poured into 1000 ml of a saturated aqueous solution of sodium chloride and then extracted three times, each time with 500 ml of ethyl acetate. The combined organic extracts were dried over anhydrous magnesium sulphate, and the solvent was removed by distillation under reduced pressure. The resulting residue was purified by silica gel flash column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 10 : 1 to 5 : 1 by volume as the eluent, to obtain 29.3 g (yield 85%) of the title compound as a colourless oil.

$[\alpha]_D^{24} -48.56$ (c=1.04, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.59 (1H, doublet, J = 2.2 Hz);
 7.44 (1H, doublet, J = 8.3 Hz);
 7.24 (1H, doublet of doublets, J = 8.3 & 2.2 Hz);
 5.12 (1H, singlet);

3.81 (1H, doubled doublet of doublets, J = 10.6, 4.1 & 3.0 Hz);
 3.51 (1H, doubled doublet of doublets, J = 10.6, 10.6 & 2.8 Hz);
 3.40 (1H, doublet, J = 12.5 Hz);
 3.31 (1H, doublet, J = 12.5 Hz);
 2.35 (1H, doubled doublet of doublets, J = 15.8, 10.6 & 4.1 Hz);
 1.91 (1H, doubled doublet of doublets, J = 15.8, 3.0 & 2.8 Hz);
 0.88 (9H, singlet);
 0.02 (3H, singlet);
 -0.04 (3H, singlet).

1(e) 1-Amino-4-t-butyltrimethylsilyloxy-(2R)-(3,4-dichlorophenyl)-2-butanol

10.00 g (25.6 mmole) of 1-azido-4-t-butyltrimethylsilyloxy-(2R)-(3,4-dichlorophenyl)-2-butanol [prepared as described in step (d) above] were dissolved in 100 ml of tetrahydrofuran and 0.6 ml of water, and 7.39 g (28.2 mmole) of triphenylphosphine were added to the resulting solution. The mixture was then stirred under a nitrogen atmosphere at 80°C for 4 hours. At the end of this time, the solvent was removed by distillation under reduced pressure, hexane was added to the resulting residue and the deposited crystals were removed by filtration. The filtrate was concentrated by evaporation under reduced pressure, and the resulting residue was purified by silica gel flash column chromatography, using a gradient elution method, with mixtures of methylene chloride and methanol ranging from 30 : 1 to 10 : 1 by volume as the eluent, to obtain 3.83 g (yield 41%) of the title compound as a colourless oil.

$[\alpha]_D^{24} +3.94$ (c=0.71, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, $CDCl_3$) δ ppm:

7.56 (1H, doublet, J = 2.2 Hz);
 7.42 (1H, doublet, J = 8.6 Hz);
 7.22 (1H, doublet of doublets, J = 8.6 & 2.2 Hz);
 4.91 (1H, broad singlet);
 3.73 (1H, doubled doublet of doublets, J = 10.3, 4.6 & 3.7 Hz);
 3.53 (1H, doubled doublet of doublets, J = 10.3, 10.2 & 3.7 Hz);
 2.91 (1H, doublet, J = 13.1 Hz);
 2.86 (1H, doublet, J = 13.1 Hz);
 2.16 (1H, doubled doublet of doublets, J = 14.6, 10.2 & 4.6 Hz);
 1.88 (1H, doubled doublet of doublets, J = 14.6, 3.7 & 3.7 Hz);
 1.44 (2H, broad singlet);
 0.87 (9H, singlet);
 0.01 (3H, singlet);
 -0.04 (3H, singlet).

1(f) 2-[(5R)-(3,4-Dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethanol t-butyltrimethylsilyl ether

1.35 g (3.71 mmole) of 1-amino-4-t-butyltrimethylsilyloxy-(2R)-(3,4-dichlorophenyl)-2-butanol [prepared as described in step (e) above] were dissolved in 50 ml of benzene, and 167 mg (5.57 mmole) of paraformaldehyde and 13 mg of p-toluenesulphonyl chloride were added to the resulting solution. The mixture was then heated under reflux under a nitrogen atmosphere at 100°C for 3 hours, using a Dean-Stark apparatus. At the end of this time, the solvent was removed by distillation under reduced pressure, and 100 ml of ethyl acetate were added to the residue. The resulting solution was washed with a saturated aqueous solution of sodium hydrogencarbonate and then dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure to yield 2-[(5R)-(3,4-dichlorophenyl)oxazolidin-5-yl]ethanol t-butyltrimethylsilyl ether. This compound was dissolved in 50 ml of methylene chloride, and 0.62 ml (4.45 mmole) of triethylamine and 45 mg (0.37 mmole) of 4-dimethylaminopyridine were added to the resulting solution. 1.03 g (4.47 mmole) of 3,4,5-trimethoxybenzoyl chloride were then added, whilst ice-cooling, and the mixture was stirred at 0°C for 1 hour. 100 ml of methylene chloride were added to the reaction mixture, and the mixture was washed with 10% w/v aqueous hydrochloric acid, with a saturated aqueous solution of sodium hydrogencarbonate and with a saturated aqueous solution of sodium chloride, in that order. It was then dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel flash column chromatography, using a gradient elution method, with mixtures of ethyl acetate and hexane ranging from 1 : 5 to 2 : 1 by volume as the eluent, to obtain 1.27 g (yield 60%) of the title compound as a white amorphous substance.

$[\alpha]_D^{24} +61.73$ (c=1.39, methanol)

1(g) 2-[(5R)-(3,4-Dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethanol methanesulphonate

3.95 g (6.92 mmole) of 2-[(5R)-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethanol t-butylidimethylsilyl ether [prepared as described in step (f) above] were dissolved in 70 ml of a 3 : 3 : 1 by volume mixture of acetic acid, tetrahydrofuran and water. The mixture was then heated under a nitrogen atmosphere at 80°C for 8 hours. At the end of this time, the solution was neutralised by the addition of a saturated aqueous solution of sodium hydrogencarbonate and extracted with ethyl acetate. The organic layer was then dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was dissolved in 30 ml of pyridine. 70 mg (0.57 mmole) of 4-dimethylaminopyridine and 0.66 ml (8.53 mmole) of methanesulphonyl chloride were added, whilst ice-cooling, to the resulting solution, and the mixture was then stirred under a nitrogen atmosphere at 0°C for 2 hours. At the end of this time, the reaction mixture was poured into 200 ml of ice-cooled 10% w/v aqueous hydrochloric acid and then extracted three times, each time with 100 ml of ethyl acetate. The combined organic extracts were washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel flash column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 5 : 1 to 1 : 1 by volume as the eluent, to obtain 3.02 g (yield 82%) of the title compound as a white amorphous substance. $[\alpha]_D^{24} +53.1$ (c=1.0, methanol)

1(h) 1-[2-[(5R)-(3,4-Dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-phenylpiperidine-4-carboxamide

150 mg (0.28 mmole) of 2-[(5R)-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethanol methanesulphonate [prepared as described in step (g) above] and 75 mg (0.31 mmole) of 4-phenylpiperidine-4-carboxamide hydrochloride were dissolved in 3 ml of anhydrous dimethylformamide, and 71 mg (0.85 mmole) of sodium hydrogencarbonate and 70 mg (0.42 mmole) of potassium iodide were added to the resulting solution. The mixture was then heated under a nitrogen atmosphere at 80°C for 6 hours. At the end of this time, 50 ml of a saturated aqueous solution of sodium chloride were added to the reaction mixture, which was then extracted three times, each time with 50 ml of ethyl acetate. The combined organic extracts were then dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel thin-layer chromatography, using a 10 : 1 by volume mixture of methylene chloride and methanol as the developing solvent, to give 127 mg (yield 71%) of the title compound as a white amorphous substance. $[\alpha]_D^{24} +25.2$ (c=0.48, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, $CDCl_3$) δ ppm:

7.50 - 7.10 (8H, multiplet);
6.67 (2H, singlet);
5.30 - 4.85 (2H, multiplet);
5.18 (2H, singlet);
4.13 - 3.70 (2H, multiplet);
3.87 (3H, singlet);
3.85 (6H, singlet);
2.67 - 1.93 (12H, multiplet).

Infrared absorption spectrum ν_{max} (KBr) cm^{-1} :

2940, 1678, 1640, 1584, 1456, 1416, 1236, 1128.

Elemental analysis:				
Calculated for $C_{33}H_{37}N_3O_6Cl_2 \cdot \frac{1}{2}H_2O$:				
Found:	C: 60.77%;	H: 5.83%;	N: 6.45%;	Cl: 10.89%;
	C: 60.63%;	H: 5.94%;	N: 6.39%;	Cl: 10.93%.

Mass spectrometric analysis (FAB) m/z : 642 (M+H)⁺

The compounds of the following Examples 2 - 4 were produced following the same procedure as described in Example 1 above.

EXAMPLE 2

1-[2-[(5R)-(3,4-Dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-phenylpiperidine-4-(N,N-dimethyl-carboxamide)

Yield: 76%

$[\alpha]_D^{24} +19.2$ (c=1.05, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.60 - 7.10 (8H, multiplet);
6.71 (2H, broad singlet);
5.50 - 4.90 (2H, multiplet);
3.88 (9H, singlet);
3.40 - 1.40 (20H, multiplet).

Infrared absorption spectrum ν_{max} (KBr) cm^{-1} :

2938, 1633, 1584, 1464, 1416, 1236, 1128.

Elemental analysis:				
Calculated for $\text{C}_{35}\text{H}_{41}\text{N}_3\text{O}_6\text{Cl}_2 \cdot \text{H}_2\text{O}$:				
	C: 61.05%;	H: 6.29%;	N: 6.10%;	Cl: 10.30%;
Found:	C: 60.66%;	H: 6.25%;	N: 5.80%;	Cl: 10.65%.

EXAMPLE 3

1-[2-[(5R)-(3,4-Dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-(pyrrolidin-1-ylcarbonyl)-4-phenyl-piperidine

Yield: 82%

$[\alpha]_D^{24} +23.2$ (c=0.49, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.52 - 7.40 (2H, multiplet);
7.33 - 7.00 (6H, multiplet);
6.68 (2H, singlet);
5.30 - 4.85 (2H, multiplet);
4.09 - 3.65 (2H, multiplet);
3.87 (3H, singlet);
3.86 (6H, singlet);
3.56 - 3.41 (2H, broad singlet);
2.89 - 2.60 (4H, multiplet);
2.48 - 2.29 (4H, multiplet);
2.20 - 1.98 (10H, multiplet).

Infrared absorption spectrum ν_{max} (KBr) cm^{-1} :

2948, 1625, 1584, 1464, 1415, 1235, 1128.

Elemental analysis:				
Calculated for $\text{C}_{37}\text{H}_{43}\text{N}_3\text{O}_6\text{Cl}_2 \cdot \frac{1}{2}\text{H}_2\text{O}$:				
	C: 62.98%;	H: 6.28%;	N: 5.95%;	Cl: 10.04%;
Found:	C: 63.01%;	H: 6.43%;	N: 5.97%;	Cl: 9.71%.

Mass spectrometric analysis (FAB) m/z : 696 (M+H)⁺

EXAMPLE 4

1-[2-[(5R)-(3,4-Dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-morpholinocarbonyl-4-phenylpiperidine

Yield: 63%

$[\alpha]_D^{24}$ +20.5 (c=1.04, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl₃) δ ppm:

7.60 - 7.10 (8H, multiplet);
6.70 (2H, singlet);
5.40 - 4.90 (2H, multiplet);
3.87 (9H, singlet);
4.10 - 1.40 (22H, multiplet).

Infrared absorption spectrum ν_{\max} (KBr) cm⁻¹:
2966, 1637, 1584, 1455, 1416, 1233, 1128.

Elemental analysis:				
Calculated for C ₃₇ H ₄₃ N ₃ O ₇ Cl ₂ · 1/2H ₂ O:				
	C: 61.58%;	H: 6.15%;	N: 5.82%;	Cl: 9.83%;
Found:	C: 61.47%;	H: 6.62%;	N: 5.45%;	Cl: 9.67%.

Mass spectrometric analysis (FAB) m/z : 712 (M+H)⁺

EXAMPLES 5 TO 40

The compounds shown in the following formulae (A-1) and (A-2) were also prepared by the same procedure as described above. The meanings of the various substituent groups shown in these formulae are summarised in the corresponding one of Tables A-1 and A-2. For convenience, the products of Examples 1 to 4 are also summarised in these Tables.

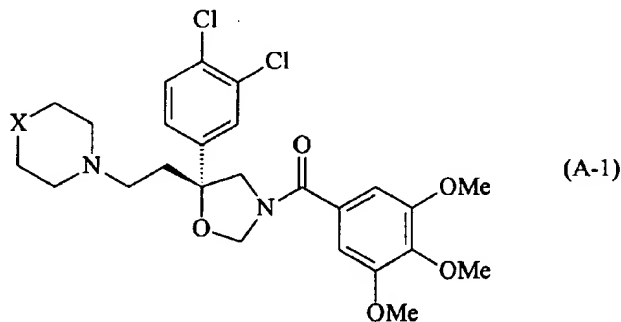


Table A-1

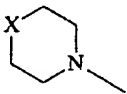
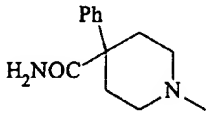
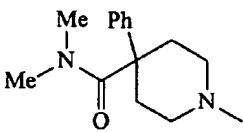
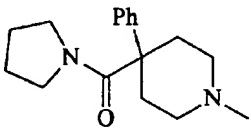
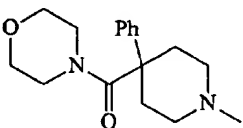
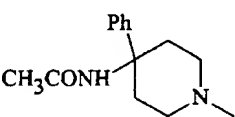
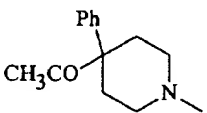
Example No.		$[\alpha]_D^{24}$ (methanol)	FAB Mass spectrometry $[M+H]^+$
1		+25.2 (c=0.48)	642
2		+19.2 (c=1.05)	670
3		+23.2 (c=0.49)	696
4		+20.5 (c=1.04)	712
5		+23.3 (c=0.49)	656
6		+26.7 (c=0.48)	641

Table A-1 (cont.)

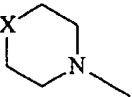
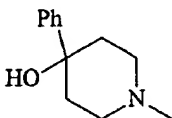
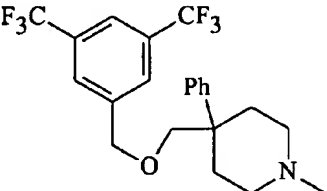
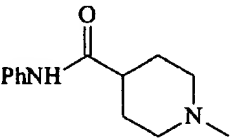
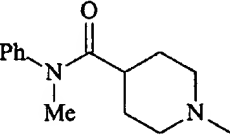
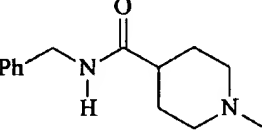
Example No.		$[\alpha]_D^{24}$ (methanol)	FAB Mass spectrometry $[M+H]^+$
7		+21.1 (c=0.50)	615
8		+21.8 (c=1.06)	855
9		+18.7 (c=1.03)	642
10		+33.1 (c=0.95)	656
11		+28.7 (c=0.44)	656

Table A-1 (cont.)

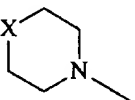
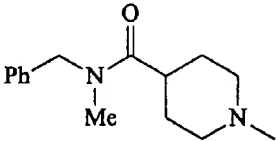
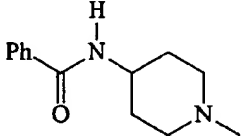
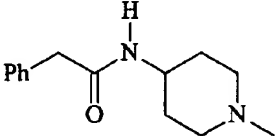
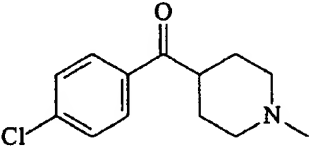
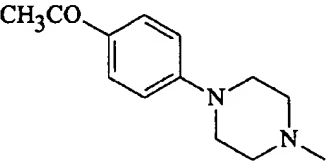
Example No.		$[\alpha]_D^{24}$ (methanol)	FAB Mass spectrometry $[M+H]^+$
12		+29.9 (c=0.41)	670
13		+27.9 (c=1.04)	642
14		+35.8 (c=1.07)	656
15		+25.6 (c=0.85)	661
16		+1.6 (c=0.54)	642

Table A-I (cont.)

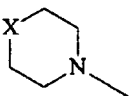
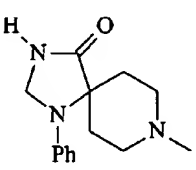
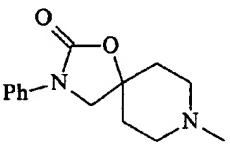
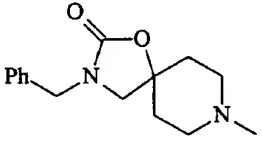
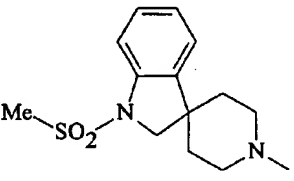
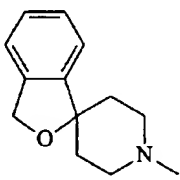
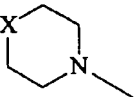
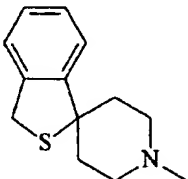
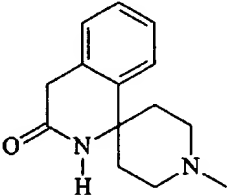
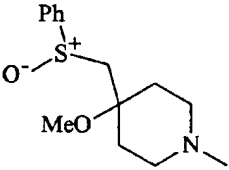
Example No.		$[\alpha]_D^{24}$ (methanol)	FAB Mass spectrometry $[M+H]^+$
17		+17.0 (c=0.50)	669
18		+19.9 (c=0.43)	670
19		+27.4 (c=1.02)	684
20		+10.8 (c=1.04)	704
21		+26.5 (c=0.60)	626

Table A-1 (cont.)

Example No.		$[\alpha]_D^{24}$ (methanol)	FAB Mass spectrometry $[M+H]^+$
22		+19.8 (c=0.55)	643
23		+24.0 (c=1.07)	654
24		+71.8 (c=1.02)	691

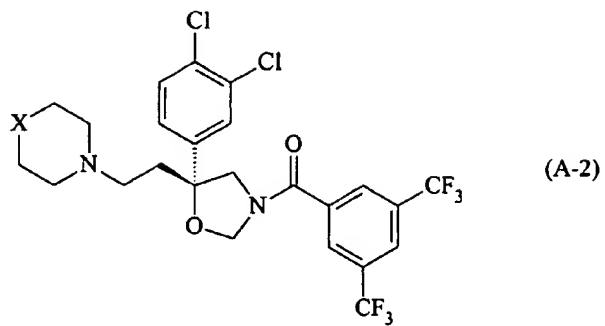


Table A-2

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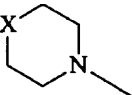
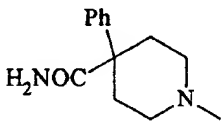
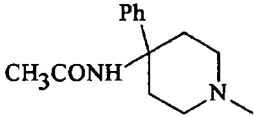
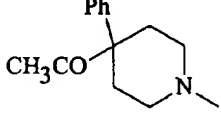
Example No.		$[\alpha]_D^{24}$ (methanol)	FAB Mass spectrometry $[M+H]^+$
25		+25.2 (c=0.46)	688
26		+21.6 (c=0.48)	702
27		+22.6 (c=0.48)	687

Table A-2 (cont.)

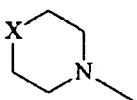
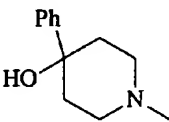
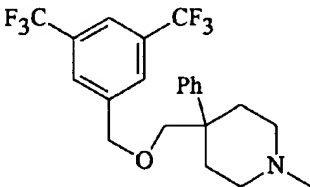
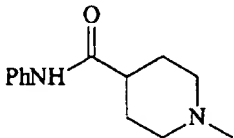
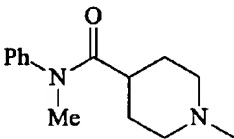
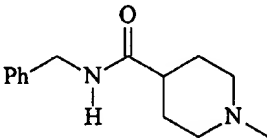
Example No.		$[\alpha]_D^{24}$ (methanol)	FAB Mass spectrometry $[M+H]^+$
28		+20.7 (c=0.48)	661
29		+17.5 (c=0.12)	901
30		+17.2 (c=1.05)	688
31		+33.6 (c=1.03)	702
32		+23.1 (c=0.50)	702

Table A-2 (cont.)

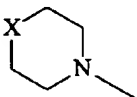
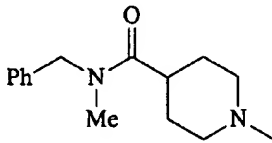
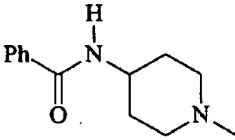
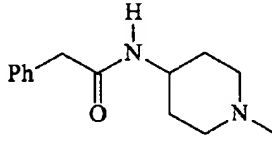
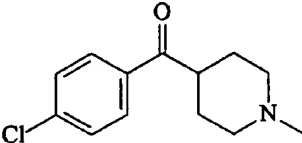
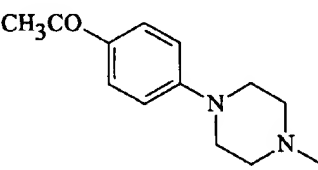
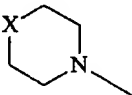
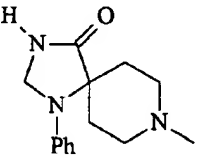
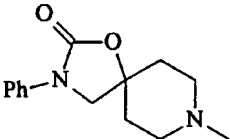
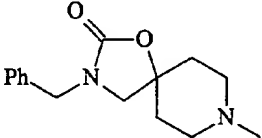
Example No.		$[\alpha]_D^{24}$ (methanol)	FAB Mass spectrometry $[M+H]^+$
33		+26.8 (c=0.42)	716
34		+17.0 (c=1.03)	688
35		+24.6 (c=1.08)	702
36		+19.5 (c=0.99)	707
37		+3.3 (c=0.57)	688

Table A-2 (cont.)

Example No.		$[\alpha]_D^{24}$ (methanol)	FAB Mass spectrometry $[M+H]^+$
38		+18.6 (c=0.51)	715
39		+28.8 (c=0.48)	716
40		+23.8 (c=0.73)	730

EXAMPLE 41

1-[3-[(5R)-(3,4-Dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]propyl]-4-phenylpiperidine-4-carboxamide

41(a) Methyl 4-(3,4-dichlorophenyl)-4-oxobutanoate

1.00 g (6.80 mmole) of dichlorobenzene and 0.72 g (7.14 mmole) of succinic anhydride were suspended in 3 ml of dichloroethane and 1.36 g (10.2 mmole) of aluminium chloride powder were added to the suspension. The mixture was then stirred at 60°C for 3 hours. At the end of this time, the reaction mixture was ice-cooled and 1 N aqueous hydrochloric acid was added. The mixture was then extracted with methylene chloride. The organic extract was washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous sodium sulphate. The solvent was then removed by distillation under reduced pressure. The resulting residue was dissolved in 30 ml of methanol, and 0.20 ml of an aqueous solution of sulphuric acid was added. The solution was then heated under reflux for 2 hours, after which the reaction mixture was cooled to room temperature, poured into water and then extracted with diethyl ether. The organic extract was washed with a saturated aqueous solution of sodium hydrogencarbonate and with a saturated aqueous solution of sodium chloride, in that order, and dried over anhydrous sodium sulphate. The solvent was then removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and diethyl ether ranging from 17 : 3 to 7 : 3 by volume as the eluent, to obtain 0.25 g (yield 14%) of the title compound as pale orange crystals.

Nuclear Magnetic Resonance Spectrum (400 MHz, $CDCl_3$) δ ppm:

8.07 (1H, doublet, J = 2 Hz);
 7.81 (1H, doublet of doublets, J = 2 & 8 Hz);
 7.56 (1H, doublet, J = 8 Hz);
 3.71 (3H, singlet);
 3.27 (2H, triplet, J = 7 Hz);
 2.78 (2H, triplet, J = 7 Hz).

41(b) Methyl 4-(3,4-dichlorophenyl)-4-pentenoate

330 mg (0.92 mmole) of methyltriphenylphosphonium bromide and 105 mg (0.94 mmole) of potassium t-butoxide were suspended in 4 ml of dried benzene, and the mixture was stirred under a stream of nitrogen at room temperature for 4 hours. A solution prepared by dissolving 200 mg of methyl 4-(3,4-dichlorophenyl)-4-oxobutanoate [prepared as described in step (a) above] in 1 ml of benzene was added to the reaction mixture, and the mixture was then stirred for 18 hours. At the end of this time, the reaction mixture was filtered through a Celite (trade mark) filter aid and washed with diethyl ether. The filtrate was then concentrated by evaporation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a 23 : 2 by volume mixture of hexane and diethyl ether as the eluent, to give 95 mg (yield 64%) of the title compound as a pale yellow oil.
 Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl₃) δ ppm:

7.48 (1H, doublet, J = 2 Hz);
 7.40 (1H, doublet, J = 8 Hz);
 7.23 (1H, doublet of doublets, J = 2 & 8 Hz);
 5.32 (1H, singlet);
 5.14 (1H, singlet);
 3.67 (3H, singlet);
 2.79 (2H, triplet, J = 8 Hz);
 2.48 (2H, triplet, J = 8 Hz).

41(c) 4-(3,4-Dichlorophenyl)-4-penten-1-ol t-butyldimethylsilyl ether

Following a procedure similar to that described in Example 1(b), but using methyl 4-(3,4-dichlorophenyl)-4-pentenoate [prepared as described in step (b) above], the title compound was obtained in a yield of 93%.
 Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl₃) δ ppm:

7.49 (1H, doublet, J = 2 Hz);
 7.38 (1H, doublet, J = 9 Hz);
 7.24 (1H, doublet of doublets, J = 2 & 9 Hz);
 5.30 (1H, singlet);
 5.13 (1H, doublet, J = 1 Hz);
 3.62 (2H, triplet, J = 6 Hz);
 2.52 (2H, triplet, J = 8 Hz);
 1.60 - 1.68 (2H, multiplet);
 0.90 (9H, singlet);
 0.04 (6H, singlet).

41(d) (2R)-5-(t-Butyldimethylsilyloxy)-2-(3,4-dichlorophenyl)pentane-1,2-diol

Following a procedure similar to that described in Example 1(c), but using 4-(3,4-dichlorophenyl)-4-penten-1-ol t-butyldimethylsilyl ether [prepared as described in step (c) above], the title compound was obtained in a yield of 90%.

Optical purity: 98% ee
 $[\alpha]_D^{24}$ -2.08 (c=0.48, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl₃) δ ppm:

7.56 (1H, doublet, J = 2 Hz);
 7.41 (1H, doublet, J = 8 Hz);
 7.23 (1H, doublet of doublets, J = 2 & 8 Hz);
 4.96 (1H, singlet);
 3.53 - 3.70 (4H, multiplet);
 1.98 - 2.14 (3H, multiplet);

1.35 - 1.57 (2H, multiplet);
 0.91 (9H, singlet);
 0.082 (3H, singlet);
 0.078 (3H, singlet).

41(e) (2R)-1-Azido-5-(t-butyldimethylsilyloxy)-2-(3,4-dichlorophenyl)-2-pentanol

Following a procedure similar to that described in Example 1(d), but using (2R)-5-(t-butyldimethylsilyloxy)-2-(3,4-dichlorophenyl)pentane-1,2-diol [prepared as described in step (d) above], the title compound was obtained in a yield of 86%.

$[\alpha]_D^{24}$ -48.2 (c=0.61, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.58 (1H, doublet, J = 2 Hz);
 7.42 (1H, doublet, J = 9 Hz);
 7.23 (1H, doublet of doublets, J = 2 & 9 Hz);
 4.93 (1H, singlet);
 3.67 (1H, multiplet);
 3.58 (1H, multiplet);
 3.43 (1H, doublet, J = 12 Hz);
 3.31 (1H, doublet, J = 12 Hz);
 2.13 (1H, multiplet);
 2.04 (1H, multiplet);
 1.54 (1H, multiplet);
 1.40 (1H, multiplet);
 0.91 (9H, singlet);
 0.09 (3H, singlet);
 0.08 (3H, singlet).

41(f) (2R)-1-Amino-5-(t-butyldimethylsilyloxy)-2-(3,4-dichlorophenyl)-2-pentanol

Following a procedure similar to that described in Example 1(e), but using (2R)-1-azido-5-(t-butyldimethylsilyloxy)-2-(3,4-dichlorophenyl)-2-pentanol [prepared as described in step (e) above], the title compound was obtained in a yield of 76%.

$[\alpha]_D^{24}$ -8.13 (c=0.48, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.54 (1H, doublet, J = 2 Hz);
 7.40 (1H, doublet, J = 9 Hz);
 7.21 (1H, doublet of doublets, J = 2 & 9 Hz);
 4.57 (1H, broad singlet);
 3.50 - 3.62 (2H, multiplet);
 2.96 (1H, doublet, J = 13 Hz);
 2.82 (1H, doublet, J = 13 Hz);
 1.93 (1H, multiplet);
 1.80 (1H, multiplet);
 1.33 - 1.60 (2H, multiplet);
 0.89 (9H, singlet);
 0.04 (6H, singlet).

41(g) 3-[5(R)-(3,4-Dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]-1-propanol t-butyldimethylsilyl ether

Following a procedure similar to that described in Example 1(f), but using (2R)-1-amino-5-(t-butyldimethylsilyloxy)-2-(3,4-dichlorophenyl)-2-pentanol [prepared as described in step (f) above], the title compound was obtained in a yield of 48%.

$[\alpha]_D^{24}$ +37.73 (c=0.44, methanol)

41(h) 3-[(5R)-(3,4-Dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]-1-propanol methanesulphonate

Following a procedure similar to that described in Example 1(g), but, using 3-[(5R)-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]-1-propanol t-butyldimethylsilyl ether [prepared as described in step (g) above], the

title compound was obtained in a yield of 93%.
 $[\alpha]_D^{24} +52.90$ (c=0.62, methanol)

41(i) 1-[3-[(5R)-(3,4-Dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]propyl]-4-phenylpiperidine-4-carboxamide

Following a procedure similar to that described in Example 1(h), but using 3-[(5R)-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]-1-propanol methanesulphonate [prepared as described in step (h) above] the title compound was obtained in a yield of 66%.

$[\alpha]_D^{24} +35.9$ (c=0.48, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, $CDCl_3$) δ ppm:

7.60 - 7.10 (8H, multiplet);
 6.68 (2H, broad singlet);
 5.40 - 4.90 (4H, multiplet);
 3.88 (9H, singlet);
 3.87 (9H, singlet);
 4.10 - 1.10 (16H, multiplet).

Infrared absorption spectrum ν_{max} (KBr) cm^{-1} :

3440, 3353, 2940, 1676, 1641, 1585

Elemental analysis:				
Calculated for $C_{34}H_{39}N_3O_6Cl_2 \cdot \frac{1}{2}H_2O$:				
	C: 61.35%;	H: 6.06%;	N: 6.31%;	Cl: 10.65%;
Found:	C: 61.81%;	H: 6.22%;	N: 6.50%;	Cl: 10.26%.

Mass spectrometric analysis (FAB) m/z : 656 (M+H)⁺

EXAMPLES 42 TO 50

The compounds shown in the following formula (A-3) were also prepared by the same procedure as described in Example 41 above. The meanings of the various substituent groups shown in these formulae are summarised in Table A-3. For convenience, the product of Example 41 is also summarised in this Table.

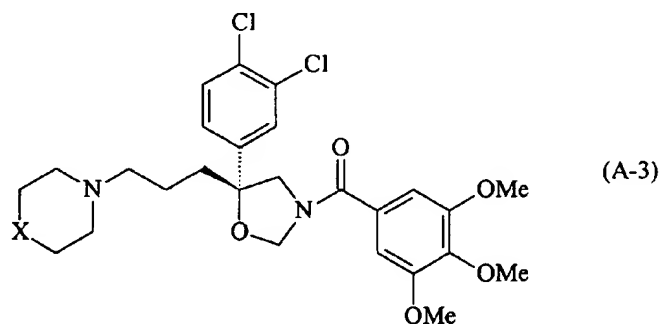


Table A-3

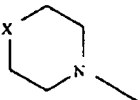
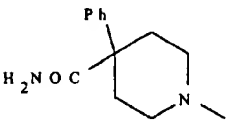
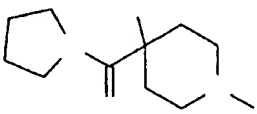
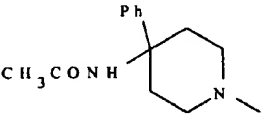
Example No.		$[\alpha]_D^{24}$ (methanol)	FAB Mass spectrometry $[M+H]^+$
41		+35.9 (c=0.48)	656
42		+36.4 (c=0.50)	710
43		+36.0 (c=0.45)	670

Table A-3 (cont.)

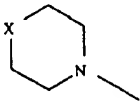
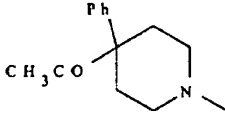
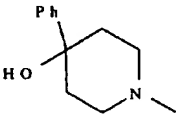
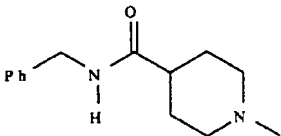
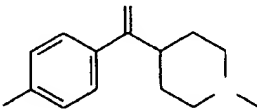
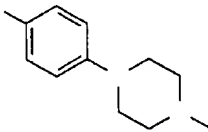
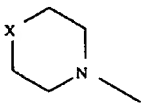
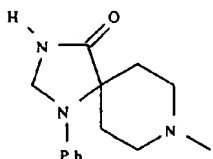
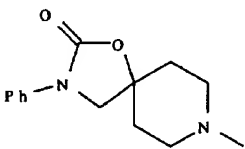
Example No.		$[\alpha]_D^{24}$ (methanol)	FAB Mass spectrometry $[M+H]^+$
44		+38.3 (c=0.57)	655
45		+41.8 (c=0.49)	629
46		+34.6 (c=0.46)	670
47		+50.3 (c=0.50)	675
48		+32.5 (c=0.54)	656

Table A-3 (cont.)

Example No.		$[\alpha]_D^{24}$ (methanol)	FAB Mass spectrometry $[M+H]^+$
49		+37.9 (c=0.46)	683
50		+41.3 (c=0.44)	684

EXAMPLE 51

1-[2-[2-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-carboxamide
(Compound 2-1969)

51(a) 3-(3,4-Dichlorophenyl)-3,4-epoxy-1-butanol t-butyldimethylsilyl ether

3.00 g (9.05 mmole) of 3-(3,4-dichlorophenyl)-3-butenol t-butyldimethylsilyl ether [prepared as described in Example 1(b)] were dissolved in 60 ml of methylene chloride, and 2.52 g (30.0 mmole) of sodium hydrogencarbonate and 3.88 g (15.7 mmole) of 3-chloroperbenzoic acid (content: 70%) were added to the resulting solution. The mixture was then stirred at room temperature for 3 hours. At the end of this time, the reaction mixture was diluted with methylene chloride and then washed with a 1 N aqueous solution of sodium hydroxide and with a saturated aqueous solution of sodium chloride. The organic layer was then dried over anhydrous sodium sulphate, and the solvent was removed by evaporation under reduced pressure. The resulting residue was then purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and diethyl ether ranging from 24 : 1 to 19 : 1 by volume as the eluent, to obtain 2.70 g of the title compound.

Nuclear Magnetic Resonance Spectrum (400 MHz, $CDCl_3$) δ ppm:

7.47 (1H, doublet, J = 2 Hz);
7.38 (1H, doublet, J = 8 Hz);
7.21 (1H, doublet of doublets, J = 2 & 8 Hz);
3.57 - 3.72 (2H, multiplet);
3.01 (1H, doublet, J = 5 Hz);
2.68 (1H, doublet, J = 5 Hz);
2.27 (1H, multiplet);
2.01 (1H, multiplet);

0.84 (9H, singlet);
 -0.016 (3H, singlet);
 -0.024 (3H, singlet).

5 51(b) 4-(t-Butyldimethylsilyloxy)-2-(3,4-dichlorophenyl)-1-[N-(t-butoxycarbonyl)-N-(2-hydroxyethyl)amino]-2-butanol

1.50 g (4.32 mmole) of 3-(3,4-dichlorophenyl)-3,4-epoxy-1-butanol t-butyldimethylsilyl ether [prepared as described in step (a) above] and 1.84 g (17.3 mmole) of lithium perchlorate were dissolved in 30 ml of acetonitrile. The mixture was then stirred under a nitrogen atmosphere at room temperature for 10 minutes. 2.11 g (34.5 mmole) of 2-aminoethanol were added to the reaction mixture, and the mixture was heated under reflux for 5 hours. At the end of this time, the reaction mixture was cooled to room temperature, diluted with ethyl acetate and then washed with a saturated aqueous solution of sodium chloride. The organic layer was separated and dried over anhydrous sodium sulphate, and then the solvent was removed by distillation under reduced pressure.

The resulting residue was dissolved in 30 ml of methylene chloride, and 0.89 ml (6.42 mmole) of triethylamine and 943 mg (4.32 mmole) of di-t-butyl dicarbonate were added to the resulting solution. The mixture was then stirred at room temperature for 16 hours. At the end of this time, the reaction mixture was poured into water and extracted with methylene chloride. The extract was then washed with a saturated aqueous solution of sodium chloride and dried over anhydrous sodium sulphate. The solvent was then removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a 3 : 2 by volume mixture of hexane and ethyl acetate as the eluent, to give 1.94 g of the title compound.

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.30 - 7.75 (3H, multiplet);
 5.30 & 5.57 (total 1H, each broad singlet);
 3.05 - 4.00 (9H, multiplet);
 2.00 - 2.40 (2H, multiplet);
 1.53 (9H, singlet);
 0.94 (9H, singlet);
 0.09 (3H, singlet);
 0.07 (3H, singlet).

Infrared absorption spectrum ν_{max} (KBr) cm^{-1} :

3298, 2955, 2936, 2885, 2857, 1659.

Mass spectrometric analysis (FAB) m/z : 508 ($\text{M}+\text{H}$)⁺

51(c) 2-[4-t-Butoxycarbonyl-2-(3,4-dichlorophenyl)morpholin-2-yl]ethanol t-butyldimethylsilyl ether

10.4 g (20.5 mmole) of 4-(t-butyldimethylsilyloxy)-2-(3,4-dichlorophenyl)-1-[N-(t-butoxycarbonyl)-N-(2-hydroxyethyl)amino]-2-butanol [prepared as described in step (b) above] and 8.03 g (30.6 mmole) of triphenylphosphine were dissolved in 180 ml of anhydrous toluene, and a solution of 5.33 g (30.6 mmole) of diethyl azodicarboxylate in 20 ml of toluene was added dropwise under a nitrogen atmosphere at room temperature. The mixture was then stirred for 2 hours. At the end of this time, the reaction mixture was poured into an aqueous solution of ammonium chloride and extracted with ethyl acetate. The mixture was then washed with a saturated aqueous solution of sodium chloride. The organic extract was dried over anhydrous sodium sulphate, and then the solvent was removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 23 : 2 to 9 : 1 by volume as the eluent, to obtain 8.85 g of the title compound.

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.56 (1H, broad singlet);
 7.43 (1H, doublet, $J = 9$ Hz);
 7.28 (1H, doublet of doublets, $J = 2$ & 9 Hz);
 4.20 - 4.55 (1H, broad singlet);
 3.00 - 3.80 (8H, multiplet);
 1.80 - 2.10 (2H, multiplet);
 1.35 - 1.60 (9H, broad singlet);
 0.85 (9H, multiplet);
 -0.01 (6H, singlet).

Infrared absorption spectrum ν_{\max} , cm^{-1} (CHCl_3): 2957, 2931, 2859, 1730, 1687.
Mass spectrometric analysis (FAB) m/z : 490 ($\text{M}+\text{H}$)⁺

51(d) 2-[2-(3,4-Dichlorophenyl)morpholin-2-yl]ethanol

7.80 g (15.9 mmole) of 2-[4-t-butoxycarbonyl-2-(3,4-dichlorophenyl)morpholin-2-yl]ethanol t-butyldimethylsilyl ether [prepared as described in step (c) above] were dissolved in 150 ml of methylene chloride and 7.05 g (35.5 mmole) of β -bromocatecholborane were added. The mixture was then stirred under a stream of nitrogen at room temperature for 2 hours. At the end of this time, 150 ml of water were added to the reaction mixture, and the mixture was then stirred for a further 2 hours. The reaction mixture was made basic by adding a 1 N aqueous solution of sodium hydroxide. It was then extracted with methylene chloride and the extract was washed with a saturated aqueous solution of sodium chloride. The organic extract was then dried over anhydrous sodium sulphate, and the solvent was removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of methylene chloride and methanol ranging from 19 : 1 to 17 : 3 by volume as the eluent, to obtain 4.40 g of the title compound.

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.51 (1H, doublet, $J = 2$ Hz);
7.48 (1H, doublet, $J = 8$ Hz);
7.24 (1H, doublet of doublets, $J = 2$ & 8 Hz);
3.76 (1H, doublet of triplets, $J = 3$ & 12 Hz);
3.66 (1H, multiplet);
3.58 (2H, triplet, $J = 6$ Hz);
3.36 (1H, doublet, $J = 13$ Hz);
3.11 (1H, doublet, $J = 13$ Hz);
2.97 (1H, multiplet);
2.79 (1H, doublet of triplets, $J = 3$ & 13 Hz);
2.14 (1H, doublet of triplets, $J = 6$ & 15 Hz);
1.79 (1H, doublet of triplets, $J = 6$ & 15 Hz).

51(e) 2-[2-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethanol

1.28 g (4.63 mmole) of 2-[2-(3,4-dichlorophenyl)morpholin-2-yl]ethanol [prepared as described in step (d) above] were dissolved in 30 ml of methylene chloride, and 2.66 g (26.3 mmole) of triethylamine, 1.28 g (5.55 mmole) of 3,4,5-trimethoxybenzoyl chloride and 5 mg of 4-dimethylaminopyridine were added to the resulting solution. The mixture was then stirred at room temperature for 6 hours. At the end of this time, the reaction solution was poured into an aqueous solution of sodium hydrogencarbonate and extracted with methylene chloride. The extract was then washed with a saturated aqueous solution of sodium chloride. The organic extract was dried over anhydrous sodium sulphate, and the solvent was removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of methylene chloride and acetone ranging from 4 : 1 to 7 : 3 by volume as the eluent, to obtain 1.72 g of the title compound.

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

6.80 - 7.80 (3H, multiplet);
6.47 (2H, singlet);
3.40 - 4.80 (8H, multiplet);
3.84 and 3.86 (total 9H, each singlet);
1.75 - 2.25 (2H, multiplet).

Infrared absorption spectrum ν_{\max} , cm^{-1} (KBr): 3429, 2940, 2838, 1630, 1585.
Mass spectrometric analysis (EI) m/z : 469 (M)⁺

51(f) 2-[2-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethanol methanesulphonate

388 mg (0.83 mmole) of 2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethanol [prepared as described in step (e) above] were dissolved in 5 ml of methylene chloride, and 126 mg (1.25 mmole) of triethylamine and 0.078 ml (1.01 mmole) of methanesulphonyl chloride were added to the resulting solution. The mixture was then stirred at room temperature for 2 hours. The reaction mixture was then diluted with methylene chloride, after which it was washed with 1 N aqueous hydrochloric acid and with a saturated aqueous solution of sodium chloride, in that order.

The organic extract was dried over anhydrous sodium sulphate, and then the solvent was removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 1 : 4 to 0 : 1 by volume as the eluent, to obtain 424 mg of the title compound.

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

6.90 - 7.80 (3H, multiplet);
6.52 (2H, singlet);
3.40 - 4.35 (8H, multiplet);
3.86 and 3.87 (total 9H, each singlet);
2.93 (3H, singlet);
2.10 - 2.55 (2H, multiplet).

Infrared absorption spectrum ν_{max} , cm^{-1} (KBr):

2999, 2966, 2939, 2875, 1634, 1585.

Mass spectrometric analysis (FAB) m/z : 548 ($\text{M}+\text{H}$)⁺

51(g) 1-[2-[2-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-carboxamide

200 mg (0.36 mmole) of 2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethanol methanesulphonate [prepared as described in step (f) above], 105 mg (0.44 mmole) of 4-phenylpiperidine-4-carboxamide hydrochloride, 100 mg (1.19 mmole) of sodium hydrogencarbonate and 100 mg (0.60 mmole) of potassium iodide were suspended in 2 ml of dimethylformamide, and the mixture was then stirred under a stream of nitrogen at 80°C for 6 hours. The reaction mixture was then poured into water and extracted with ethyl acetate. The extract was then washed with an aqueous solution of sodium thiosulphate, with water and with a saturated aqueous solution of sodium chloride, in that order. The organic extract was then dried over anhydrous sodium sulphate, and the solvent was removed by distillation under reduced pressure. The resulting residue was purified by thin-layer chromatography, using a 9 : 1 by volume mixture of methylene chloride and methanol as the developing solvent and then crystallized from hexane, to give 205 mg (yield 86%) of the title compound.

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

6.80 - 7.75 (8H, multiplet);
6.48 (2H, singlet);
5.18 (2H, singlet);
1.80 - 4.70 (18H, multiplet);
3.83 and 3.85 (total 9H, each singlet).

Infrared absorption spectrum ν_{max} , cm^{-1} (KBr):

3440, 3356, 2937, 2831, 1679, 1631, 1584.

Mass spectrometric analysis (FAB) m/z : 656 ($\text{M}+\text{H}$)⁺

Elemental analysis:				
Calculated for $\text{C}_{34}\text{H}_{39}\text{N}_3\text{O}_6\text{Cl}_2 \cdot 1/10\text{H}_2\text{O}$:				
	C: 62.02%;	H: 6.00%;	N: 6.38%;	Cl: 10.76%
Found:	C: 61.54%;	H: 6.07%;	N: 6.25%;	Cl: 11.35%.

The compounds of the following Examples 52 - 69 were produced following the same procedure as described in Example 1 above.

EXAMPLE 52

1-[2-[2-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-(N,N-dimethylcarboxamide) (Compound No. 2-1971)

Yield: 84%

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Mass spectrometric analysis (FAB) m/z: 684 (M+H)⁺

Elemental analysis: Calculated for C ₃₆ H ₄₃ N ₃ O ₆ Cl ₂ :				
	C: 63.16%;	H: 6.33%;	N: 6.14%;	Cl: 10.36%;
Found:	C: 63.28%;	H: 6.64%;	N: 5.79%;	Cl: 9.96%.

EXAMPLE 53

1-[2-[2-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]-4-phenyl-4-(pyrrolidin-1-ylcarbonyl)piperidine (Compound No. 2-1972)

Yield: 76%

Mass spectrometric analysis (FAB) m/z: 710 (M+H)⁺

Elemental analysis: Calculated for C ₃₈ H ₄₅ N ₃ O ₆ Cl ₂ ·1/10H ₂ O:				
	C: 64.06%;	H: 6.39%;	N: 5.90%;	Cl: 9.95%;
Found:	C: 63.62%;	H: 6.37%;	N: 5.75%;	Cl: 9.96%.

EXAMPLE 54

1-[2-[2-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]-4-morpholinocarbonyl-4-phenylpiperidine (Compound No. 2-1973)

Yield: 68%

Mass spectrometric analysis (FAB) m/z: 726 (M+H)⁺

Elemental analysis: Calculated for C ₃₈ H ₄₅ N ₃ O ₇ Cl ₂ ·1/10H ₂ O:				
	C: 62.65%;	H: 6.25%;	N: 5.77%;	Cl: 9.73%;
Found:	C: 62.26%;	H: 6.18%;	N: 5.66%;	Cl: 9.87%.

EXAMPLE 55

1-[2-[2-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]spiro[isobenzofuran-1(3H),4'-piperidine] (Compound No. 2-2006)

Yield: 63%

Mass spectrometric analysis (FAB) m/z: 641 (M+H)⁺

Elemental analysis:				
Calculated for $C_{34}H_{38}N_2O_6Cl_2 \cdot 1/10H_2O$:				
	C: 63.47%;	H: 5.98%;	N: 4.35%;	Cl: 11.02%;
Found:	C: 63.04%;	H: 6.10%;	N: 4.24%;	Cl: 11.10%.

EXAMPLE 56

1-[2-[2-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]-1-methanesulphonylspro[indoline-3,4'-piperidine] (Compound No. 2-2014)

Yield: 85%

Mass spectrometric analysis (FAB) m/z: 718 (M+H)⁺

Elemental analysis:					
Calculated for $C_{35}H_{41}N_3O_7SCl_2$:					
	C: 58.49%;	H: 5.75%;	N: 5.85%;	Cl: 9.87%;	S: 4.46%.
Found:	C: 58.26%;	H: 5.80%;	N: 5.74%;	Cl: 10.02%;	S: 4.33%.

EXAMPLE 57

1-[2-[2-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine] (Compound No. 2-2008)

Yield: 78%

Mass spectrometric analysis (FAB) m/z: 657 (M+H)⁺

Elemental analysis:					
Calculated for $C_{34}H_{38}N_2O_5SCl_2 \cdot H_2O$:					
	C: 60.44%;	H: 5.97%;	N: 4.15%;	Cl: 10.49%;	S: 4.74%;
Found:	C: 60.68%;	H: 5.95%;	N: 3.92%;	Cl: 10.60%;	S: 4.85%.

EXAMPLE 58

1-[2-[2-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide (compound 2-2010)

Yield: 60%

Mass spectrometric analysis (FAB) m/z: 673 (M+H)⁺

Elemental analysis: Calculated for $C_{34}H_{38}N_2O_6SCl_2$:					
	C: 60.62%;	H: 5.69%;	N: 4.16%;	Cl: 10.53%;	S: 4.76%;
Found:	C: 60.50%;	H: 5.94%;	N: 4.09%;	Cl: 10.35%;	S: 4.71%.

EXAMPLE 59

1-[2-[2-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]spiro[isoquinoline-1(2H),4'-piperidine]-3(4H)-one (Compound No. 2-2015)

Yield: 80%

Mass spectrometric analysis (FAB) m/z: 668 (M+H)⁺

Elemental analysis: Calculated for $C_{35}H_{39}N_3O_6Cl_2$:					
	C: 62.87%;	H: 5.88%;	N: 6.29%;	Cl: 10.61%;	
Found:	C: 62.95%;	H: 5.98%;	N: 6.07%;	Cl: 10.77%.	

EXAMPLE 60

1-[2-[2-(3,4-Dichlorophenyl)-4-(2-pyridylcarbonyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-carboxamide (Compound No. 2-2353)

Yield: 73%

Mass spectrometric analysis (FAB) m/z: 567 (M+H)⁺

Elemental analysis: Calculated for $C_{30}H_{32}N_4O_3Cl_2 \cdot 1/2H_2O$:					
	C: 62.50%;	H: 5.77%;	N: 9.72%;	Cl: 12.30%;	
Found:	C: 62.19%;	H: 5.88%;	N: 9.39%;	Cl: 13.12%.	

EXAMPLE 61

1-[2-[2-(3,4-Dichlorophenyl)-4-(2-pyridylcarbonyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-(N,N-dimethylcarboxamide) (Compound No. 2-2355)

Yield: 70%

Mass spectrometric analysis (FAB) m/z: 595 (M+H)⁺

Elemental analysis:				
Calculated for $C_{32}H_{36}N_4O_3Cl_2 \cdot 1/2H_2O$:				
	C: 63.57%;	H: 6.17%;	N: 9.27%;	Cl: 11.73%;
Found:	C: 63.34%;	H: 6.26%;	N: 9.23%;	Cl: 11.97%.

EXAMPLE 62

1-[2-[2-(3,4-Dichlorophenyl)-4-(2-methoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-carboxamide (Compound No. 2-1585)

Yield: 75%

Mass spectrometric analysis (FAB) m/z: 596 (M+H)⁺

Elemental analysis:				
Calculated for $C_{32}H_{35}N_3O_4Cl_2 \cdot 1/2H_2O$:				
	C: 63.47%;	H: 5.99%;	N: 6.94%;	Cl: 11.71%;
Found:	C: 63.02%;	H: 6.12%;	N: 6.74%;	Cl: 12.97%.

EXAMPLE 63

1-[2-[2-(3,4-Dichlorophenyl)-4-(2-methoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-(N,N-dimethylcarboxamide) (Compound No. 2-1586)

Yield: 77%

Mass spectrometric analysis (FAB) m/z: 624 (M+H)⁺

Elemental analysis:				
Calculated for $C_{34}H_{39}N_3O_4Cl_2 \cdot 1/2H_2O$:				
	C: 64.45%;	H: 6.36%;	N: 6.63%;	Cl: 11.19%;
Found:	C: 64.29%;	H: 6.42%;	N: 6.68%;	Cl: 11.57%.

EXAMPLE 64

1-[2-[2-(3,4-Dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-carboxamide (Compound No. 2-1633)

Yield: 80%

Mass spectrometric analysis (FAB) m/z: 596 (M+H)⁺

Elemental analysis:				
Calculated for $C_{32}H_{35}N_3O_4Cl_2 \cdot 1/2H_2O$:				
	C: 63.47%;	H: 5.99%;	N: 6.94%;	Cl: 11.71%;
Found:	C: 63.44%;	H: 5.79%;	N: 6.79%;	Cl: 11.47%.

EXAMPLE 65

1-[2-[2-(3,4-Dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-(N,N-dimethylcarboxamide) (Compound No. 2-1635)

Yield: 80%

Mass spectrometric analysis (FAB) m/z: 624 (M+H)⁺

Elemental analysis:				
Calculated for $C_{34}H_{39}N_3O_4Cl_2 \cdot 1/5H_2O$:				
	C: 65.01%;	H: 6.32%;	N: 6.69%;	Cl: 11.29%;
Found:	C: 64.79%;	H: 6.47%;	N: 6.42%;	Cl: 10.93%.

EXAMPLE 66

1-[2-[2-(3,4-Dichlorophenyl)-4-(4-methoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-carboxamide (Compound No. 2-1681)

Yield: 94%

Mass spectrometric analysis (FAB) m/z: 596 (M+H)⁺

Elemental analysis:				
Calculated for $C_{32}H_{35}N_3O_4Cl_2 \cdot 1/5H_2O$:				
	C: 64.04%;	H: 5.95%;	N: 7.00%;	Cl: 11.82%;
Found:	C: 63.67%;	H: 5.97%;	N: 6.70%;	Cl: 12.20%.

EXAMPLE 67

1-[2-[2-(3,4-Dichlorophenyl)-4-(4-methoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-(N,N-dimethylcarboxamide) (Compound No. 2-1683)

Yield: 78%

Mass spectrometric analysis (FAB) m/z: 624 (M+H)⁺

Elemental analysis: Calculated for C ₃₄ H ₃₉ N ₃ O ₄ Cl ₂ :				
	C: 65.38%;	H: 6.29%;	N: 6.73%;	Cl: 11.35%;
Found:	C: 65.32%;	H: 6.94%;	N: 6.61%;	Cl: 10.97%.

EXAMPLE 68

1-[2-[2-(3,4-Dichlorophenyl)-4-(2-pyrazinylcarbonyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-carboxamide (Compound No. 2-2497)

Yield: 31%

Mass spectrometric analysis (FAB) m/z: 568 (M+H)⁺

Elemental analysis: Calculated for C ₂₉ H ₃₁ N ₅ O ₃ Cl ₂ · H ₂ O:				
	C: 59.39%;	H: 5.67%;	N: 11.87%;	Cl: 12.09%;
Found:	C: 59.58%;	H: 5.82%;	N: 11.30%;	Cl: 12.56%.

EXAMPLE 69

1-[2-[2-(3,4-Dichlorophenyl)-4-(2-pyrazinylcarbonyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-(N,N-dimethylcarboxamide) (Compound No. 2-2499)

Yield: 33%

Mass spectrometric analysis (FAB) m/z: 596 (M+H)⁺

Elemental analysis: Calculated for C ₃₁ H ₃₅ N ₅ O ₃ Cl ₂ · H ₂ O:				
	C: 60.58%;	H: 6.07%;	N: 11.40%;	Cl: 11.54%;
Found:	C: 60.57%;	H: 5.95%;	N: 9.97%;	Cl: 12.88%.

EXAMPLE 70

1-[2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-carboxamide (Compound No. 2-1969)

70(a) 1-(Chloroacetyl)amino-4-t-butyldimethylsilyloxy-(2R)-(3,4-dichlorophenyl)-2-butanol

3.60 g (9.88 mmole) of 1-amino-4-t-butyldimethylsilyloxy-(2R)-(3,4-dichlorophenyl)-2-butanol [prepared as described in Example 1(e)], 1.64 ml (11.8 mmole) of triethylamine and 121 mg (0.99 mmole) of 4-dimethylaminopyridine were dissolved in 100 ml of methylene chloride, and 0.94 ml (11.8 mmole) of chloroacetyl chloride were added dropwise, whilst ice-cooling. The mixture was then stirred at the same temperature for 2 hours. At the end of this time, 100 ml of methylene chloride were added to the reaction mixture, and the resulting mixture was washed with ice-cooled 10%

w/v aqueous hydrochloric acid, with a saturated aqueous solution of sodium hydrogencarbonate and with a saturated aqueous solution of sodium chloride, in that order. It was then dried over anhydrous magnesium sulphate. The solvent was then removed by distillation under reduced pressure, and the resulting residue was purified by silica gel flash column chromatography, using a gradient elution method, with mixtures of ethyl acetate and hexane ranging from 1 : 5 to 1 : 2 by volume as the eluent, to obtain 3.32 g (yield 76%) of the title compound as a colourless oil.

Nuclear Magnetic Resonance Spectrum (270 MHz, CDCl_3) δ ppm:

7.64 (1H, doublet, $J = 2.1$ Hz);
 7.47 (1H, doublet, $J = 8.4$ Hz);
 7.28 (1H, doublet of doublets, $J = 8.4$ & 2.1 Hz);
 7.03 (1H, broad triplet);
 5.27 (1H, singlet);
 4.04 (2H, AB-quartet, $J = 15.1$ Hz, $\Delta\delta = 0.08$ ppm);
 3.81 (1H, doublet of triplets, $J = 10.5$ & 3.7 Hz);
 3.72 (1H, doublet of doublets, $J = 13.5$ & 6.2 Hz);
 3.53 (1H, doublet of doublets, $J = 10.9$ & 2.3 Hz);
 3.45 (1H, doublet of doublets, $J = 13.5$ & 5.4 Hz);
 2.24 (1H, doubled doublet of doublets, $J = 14.8$, 10.9 & 4.1 Hz);
 1.93 (1H, doublet of triplets, $J = 14.8$ & 2.8 Hz);
 0.92 (9H, singlet);
 0.06 (3H, singlet);
 0.00 (3H, singlet).

70(b) 2-[(2R)-(3,4-Dichlorophenyl)-5-oxomorpholin-2-yl]ethanol t-butyltrimethylsilyl ether

219 mg (5.48 mmole) of sodium hydride (as a 60% w/v suspension in mineral oil) were suspended in 30 ml of anhydrous tetrahydrofuran, and a solution prepared by dissolving 1.61 g (3.65 mmole) of 1-(chloroacetyl)amino-4-*t*-butyldimethylsilyloxy-(2R)-(3,4-dichlorophenyl)-2-butanol [prepared as described in step (a) above] in 30 ml of anhydrous tetrahydrofuran was slowly added dropwise, whilst ice-cooling, over 30 minutes. The mixture was then stirred at the same temperature for 4 hours. At the end of this time, the reaction mixture was poured into ice-cooled 10% w/v aqueous hydrochloric acid and extracted three times, each time with 100 ml of ethyl acetate. The combined organic extracts were washed with a saturated aqueous solution of sodium chloride and dried over anhydrous magnesium sulphate. The solvent was then removed by distillation under reduced pressure, and the resulting residue was purified by silica gel flash column chromatography, using a gradient elution method, with mixtures of ethyl acetate and hexane ranging from 1 : 4 to 2 : 1 by volume as the eluent, to obtain 700 mg (yield 47%) of the title compound.

$[\alpha]_D^{24} = +67.65$ ($c = 0.81$, methanol)

Nuclear Magnetic Resonance Spectrum (270 MHz, CDCl_3) δ ppm:

7.532 (1H, doublet, $J = 2.2$ Hz);
 7.526 (1H, doublet, $J = 8.1$ Hz);
 7.27 (1H, doublet of doublets, $J = 8.1$ & 2.2 Hz);
 6.76 (1H, broad singlet);
 4.17 (2H, AB-quartet, $J = 17.3$ Hz, $\Delta\delta = 0.24$ ppm);
 3.98 (1H, doublet of doublets, $J = 13.0$ & 3.9 Hz);
 3.76 (1H, doublet of doublets, $J = 13.0$ & 2.0 Hz);
 3.63 (1H, multiplet);
 3.29 (1H, multiplet);
 2.12 (2H, multiplet);
 0.91 (9H, singlet);
 0.04 (3H, singlet);
 0.03 (3H, singlet).

70(c) 2-[(2R)-(3,4-Dichlorophenyl)morpholin-2-yl]ethanol

580 mg (1.43 mmole) of 2-[(2R)-(3,4-dichlorophenyl)-5-oxomorpholin-2-yl]ethanol *t*-butyldimethylsilyl ether [prepared as described in step (b) above] were dissolved in 6 ml of anhydrous tetrahydrofuran. The solution was then heated under reflux under a stream of nitrogen and 0.60 ml (6.0 mmole) of a 10 M boranedimethyl sulphide complex was added dropwise. The mixture was then stirred for 2 hours. At the end of this time, the solvent was removed by distillation under reduced pressure, and 5 ml of 1 N aqueous hydrochloric acid were added. The mixture was then stirred

at 100°C for 1 hour. The reaction mixture was air-cooled, made basic by the addition of a 1 N aqueous solution of sodium hydroxide, diluted with a saturated aqueous solution of sodium chloride and then extracted with ethyl acetate. The organic extract was washed with a saturated aqueous solution of sodium chloride and dried over anhydrous sodium sulphate. The solvent was then removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of methylene chloride and methanol ranging from 9 : 1 to 17 : 3 by volume as the eluent, to obtain 360 mg of the title compound.

$[\alpha]_D^{24} = +16.22$ (c=0.45, methanol)

The nuclear magnetic resonance spectrum, infrared spectrum and mass spectrometric analysis agreed with those of the racemate produced as described in Example 51(d).

70(d) 2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethanol

Following a procedure similar to that described in Example 51(e), but using 2-[(2R)-(3,4-dichlorophenyl)morpholin-2-yl]ethanol [prepared as described in step (c) above], the title compound was obtained in a yield of 92%.

$[\alpha]_D^{24} = +30.65$ (c=0.56, methanol)

The nuclear magnetic resonance spectrum, infrared spectrum and mass spectrometric analysis agreed with those of the racemate produced as described in Example 51(e).

70(e) 2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethanol methanesulphonate

30.0 g (63.8 mmole) of 2-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethanol [prepared as described in step (d) above] were dissolved in 500 ml of methylene chloride. 11.5 ml (83.0 mmole) of triethylamine and 5.93 ml (76.6 mmole) of methanesulphonyl chloride were then added, in that order, to the mixture, whilst ice-cooling, and the mixture was stirred at room temperature for 2 hours under a nitrogen atmosphere. The reaction mixture was then diluted with methylene chloride and washed with 1 N aqueous hydrochloric acid, and then with a saturated aqueous solution of sodium chloride, after which it was dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 1 : 4 to 1 : 9 by volume as the eluent, to give 34.8 g of the title compound.

$[\alpha]_D^{24} = +26.36$ (c = 0.66, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

6.90 - 7.80 (3H, multiplet);

6.52 (2H, singlet);

3.40 - 4.35 (8H, multiplet);

3.86 & 3.87 (total 9H, each singlet);

2.93 (3H, singlet);

2.10 - 2.55 (2H, multiplet).

Infrared absorption spectrum ν_{max} cm^{-1} (KBr):

2999, 2966, 2939, 2875, 1634, 1585

Mass spectrometric analysis (FAB) m/z : 548 ($\text{M} + \text{H}$)⁺

70(f) 1-[2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-carboxamide

Following a procedure similar to that described in Example 51(g), but using 2-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethanol methanesulphonate [prepared as described in step (e) above], the title compound was obtained in a yield of 79%.

$[\alpha]_D^{24} = +7.53$ (c=0.50, methanol)

Elemental analysis:				
Calculated for $\text{C}_{34}\text{H}_{39}\text{N}_3\text{O}_6\text{Cl}_2 \cdot 1/5\text{H}_2\text{O}$:				
Found:	C: 61.85%;	H: 6.01%;	N: 6.36%;	Cl: 10.74%;
	C: 61.51%;	H: 6.18%;	N: 6.13%;	Cl: 10.72%.

The nuclear magnetic resonance spectrum, infrared spectrum and mass spectrometric analysis agreed with those of the racemate produced as described in Example 51(g).

The compounds of the following Examples 71 - 74 were produced following the same procedure as described in Example 70 above.

EXAMPLE 71

1-[2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-(N,N-dimethyl-carboxamide) (Compound No. 2-1971)

Yield: 84%

$[\alpha]_D^{24} = +7.04$ (c=0.45, methanol)

Elemental analysis: Calculated for $C_{36}H_{48}N_3O_6Cl_2$:				
	C: 62.69%;	H: 7.02%;	N: 6.09%;	Cl: 10.28%;
Found:	C: 62.37%;	H: 6.42%;	N: 5.94%;	Cl: 10.72%.

EXAMPLE 72

1-[2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide (Compound No. 2-2010)

Yield: 66%

$[\alpha]_D^{24} = -2.50$ (c=0.50, methanol)

Elemental analysis: Calculated for $C_{34}H_{38}N_2O_6SCl_2$:					
	C: 60.62%;	H: 5.69%;	N: 4.16%;	Cl: 10.53%;	S: 4.76%;
Found:	C: 60.17%;	H: 5.68%;	N: 4.00%;	Cl: 10.47%;	S: 4.55%.

EXAMPLE 73

1-[2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]spiro[isoquinoline-1(2H),4'-piperidin]-3(4H)-one (Compound No. 2-2015)

Yield: 75%

$[\alpha]_D^{24} = +2.58$ (c=0.40, methanol)

Elemental analysis: Calculated for $C_{35}H_{39}N_3O_6Cl_2$:				
	C: 62.87%;	H: 5.88%;	N: 6.29%;	Cl: 10.61%;
Found:	C: 62.46%;	H: 6.01%;	N: 6.08%;	Cl: 9.63%.

EXAMPLE 74

1-[2-[(2R)-(3,4-Dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl]-4-phenylpiperidine-4-(N,N-dimethylcarboxamide) (Compound No. 2-1635)

Yield: 78%

$[\alpha]_D^{24} = +9.67$ (c=0.50, methanol)

Elemental analysis:				
Calculated for $C_{34}H_{39}N_3O_4Cl_2 \cdot \frac{1}{5}H_2O$:				
	C: 65.01%;	H: 6.32%;	N: 6.69%;	Cl: 11.29%;
Found:	C: 64.84%;	H: 6.46%;	N: 6.52%;	Cl: 11.58%.

EXAMPLE 75

1-[2-[(5R)-(3,4-Dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidine-5-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide (Compound No. 3-10)

600 mg (1.12 mmole) of 2-[(5R)-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethanol methanesulphonate [prepared as described in Example 1(g)], 318 mg (1.23 mmole) of spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide hydrochloride (prepared as described in Preparation 6), 283 mg (3.37 mmole) of sodium hydrogencarbonate, and 280 mg (1.69 mmole) of sodium iodide were suspended in 10 ml of anhydrous dimethylformamide, and the mixture was heated at 80°C for 8 hours under a nitrogen atmosphere. The reaction mixture was then poured into 100 ml of a saturated aqueous solution of sodium chloride and then extracted with ethyl acetate. The organic extract was dried over anhydrous magnesium sulphate, and then the solvent was removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of methylene chloride and methanol ranging from 40 : 1 to 20 : 1 by volume as the eluent, and then crystallized from diisopropyl ether, to give 496 mg of the title compound as white crystals.

$[\alpha]_D^{24} = +41.0$ (c = 1, methanol)

HPLC analysis

Column: YMC-Pack ODS-A (250 x 4.6 mmØ)

Eluent: $CH_3CN:H_2O = 40:60$, 0.1% $AcONH_4$

Flow rate: 1.0 ml/min

Retention time: 28.6 min

Nuclear Magnetic Resonance Spectrum (400 MHz, $CDCl_3$) δ ppm:

7.1 - 7.6 (7H, multiplet);

6.70 (2H, singlet);

4.9 - 5.3 (total 2H, broad singlet);

4.32 (1H, doublet, J = 16.7 Hz);

4.00 (1H, doublet, J = 16.7 Hz);

3.7 - 4.2 (2H, multiplet);

3.87 & 3.89 (total 9H, each singlet);

1.5 - 3.1 (12H, multiplet).

Infrared absorption spectrum ν_{max} cm^{-1} (KBr):

2940, 1642, 1584, 1416, 1237, 1128.

Mass spectrometric analysis (FAB) m/z 659 (M + H)⁺

Elemental analysis					
Calculated for $C_{33}H_{36}N_2O_6SCl_2 \cdot \frac{1}{2}H_2O$:					
	C: 59.28%;	H: 5.58%;	N: 4.19%;	S: 4.79%;	Cl: 10.60%;
Found:	C: 59.36%;	H: 5.58%;	N: 4.12%;	S: 4.73%;	Cl: 10.60%.

EXAMPLE 76

1-[2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide (Compound No. 3-42)

76(a) 4-(t-Butyldimethylsilyloxy)-(2R)-(3,4-dichlorophenyl)-1-[N-(t-butoxycarbonyl)-N-(2-hydroxyethyl)amino]-2-butanol

39.9 g (109 mmole) of 4-t-butyldimethylsilyloxy-(2R)-(3,4-dichlorophenyl)butane-1,2-diol [prepared as described in Example 1(c)] were dissolved in 80 ml of pyridine, and 31.3 g (164 mmole) of p-toluenesulphonyl chloride were added to the resulting solution. The mixture was then stirred at room temperature for 2 days under a nitrogen atmosphere. At the end of this time, the reaction mixture was diluted with water and extracted with ethyl acetate. The organic extract was washed with water and with a saturated aqueous solution of sodium chloride, in that order, after which it was dried over anhydrous sodium sulphate. The solvent was then removed by distillation under reduced pressure. The resulting residue was dissolved in 600 ml of acetonitrile, and 35.0 g (329 mmole) of lithium perchlorate and 33.4 g (547 mmole) of 2-aminoethanol were added to the resulting solution. The mixture was then heated under reflux for 16 hours. At the end of this time, the reaction mixture was cooled to room temperature, diluted with ethyl acetate, and washed with a saturated aqueous solution of sodium chloride. The organic layer was then separated and dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was dissolved in 700 ml of methylene chloride. 22.8 ml (164 mmole) of triethylamine and 26.3 g (120 mmole) of di-t-butyl dicarbonate were added to the resulting solution, and the mixture was stirred at room temperature for 12 hours. The reaction mixture was then poured into water and extracted with methylene chloride. The organic extract was washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous sodium sulphate. The solvent was then removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 4 : 1 to 7 : 3 by volume as the eluent, to give 49.9 g of the title compound.

$[\alpha]_D^{24} +3.92$ (c = 0.72, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, $CDCl_3$) δ ppm:

7.30 - 7.75 (3H, multiplet);
5.30 & 5.57 (total 1H, each broad singlet);
3.05 - 4.00 (9H, multiplet);
2.00 - 2.40 (2H, multiplet);
1.53 (9H, singlet);
0.94 (9H, singlet);
0.09 (3H, singlet);
0.07 (3H, singlet).

Infrared absorption spectrum ν_{max} cm^{-1} (KBr):

3420, 2957, 2933, 2885, 2861, 1687.

Mass spectrometric analysis (FAB) m/z: 508 (M + H)⁺

76(b) 2-[4-t-Butoxycarbonyl-(2R)-(3,4-dichlorophenyl)morpholin-2-yl]ethanol t-butyldimethylsilyl ether

49.9 g (98.1 mmole) of 4-t-butyldimethylsilyloxy-(2R)-(3,4-dichlorophenyl)-1-[N-(t-butoxycarbonyl)-N-(2-hydroxyethyl)amino]-2-butanol [prepared as described in step (a) above] and 30.9 g (118 mmole) of triphenylphosphine were dissolved in 600 ml of dried toluene. 51.3 g of a 40% w/v toluene solution containing 118 mmole of diethyl azodicarboxylate were added dropwise to the resulting solution at room temperature under a nitrogen atmosphere, and the mixture was stirred for 2 hours. At the end of this time, the solvent was removed by distillation under reduced pressure, and the

resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 47 : 3 to 23 : 2 by volume as the eluent, to give 43.2 g of the title compound.

$[\alpha]_D^{24} + 32.67$ ($c = 0.60$, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, $CDCl_3$) δ ppm:

7.56 (1H, broad singlet);
 7.43 (1H, doublet, $J = 9$ Hz);
 7.28 (1H, doublet of doublets, $J = 2$ & 9 Hz);
 3.00 - 4.55 (8H, multiplet);
 1.80 - 2.10 (2H, multiplet);
 1.35 - 1.60 (9H, broad singlet);
 0.85 (9H, singlet);
 -0.01 (6H, singlet).

Infrared absorption spectrum ν_{max} cm^{-1} ($CHCl_3$): 2957, 2931, 2859, 1687.

Mass spectrometric analysis (FAB) m/z : 490 ($M + H$)⁺

76(c) (2R)-(3,4-Dichlorophenyl)-2-(2-hydroxyethyl)morpholine hydrochloride

43.1 g (87.9 mmole) of 2-[4-t-butoxycarbonyl-(2R)-(3,4-dichlorophenyl)morpholin-2-yl]ethanol t-butyldimethylsilyl ether [prepared as described in step (b) above] were dissolved in 600 ml of a 4 N solution of hydrogen chloride in dioxane, and the mixture was stirred at 60°C for 4 hours. At the end of this time, the solvent was removed by distillation under reduced pressure, and diethyl ether was added to the resulting residue. The solvent was then removed by distillation under reduced pressure. The resulting residue was recrystallized from ethanol/ethyl acetate, to give 24.1 g of the title compound.

$[\alpha]_D^{24} + 48.07$ ($c = 0.57$, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, hexadeuterated dimethyl sulphoxide) δ ppm:

8.60 - 9.80 (2H, broad singlet);
 7.72 (1H, singlet);
 7.70 (1H, doublet, $J = 9$ Hz);
 7.44 (1H, doublet of doublets, $J = 2$ & 9 Hz);
 4.53 (1H, broad singlet);
 3.89 (1H, doublet of triplets, $J = 4$ & 13 Hz);
 3.75 (1H, doublet, $J = 14$ Hz);
 3.68 (1H, multiplet);
 3.30 - 3.45 (2H, multiplet);
 2.93 - 3.13 (3H, multiplet);
 2.09 (1H, multiplet);
 1.90 (1H, multiplet).

Infrared absorption spectrum ν_{max} cm^{-1} (KBr):

3378, 2966, 2893, 2812, 2783, 2724, 2656, 2530, 1598.

Mass spectrometric analysis (FAB) m/z : 276 ($M + H$)⁺ (free form)

76(d) 2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethanol

22.9 g (82.9 mmole) of (2R)-(3,4-dichlorophenyl)-2-(2-hydroxyethyl)morpholine hydrochloride [prepared as described in step (c) above] were suspended in 500 ml of methylene chloride. 27.6 ml (199 mmole) of triethylamine, 21.0 g (91.0 mmole) of 3,4,5-trimethoxybenzoyl chloride, and 100 mg of 4-dimethylaminopyridine were then added to the resulting suspension, and the mixture was stirred at room temperature for 12 hours. At the end of this time, the reaction mixture was poured into water and extracted with methylene chloride. The organic extract was washed with a saturated aqueous solution of sodium chloride and dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of methylene chloride and acetone ranging from 4 : 1 to 7 : 3 by volume as the eluent, to give 30.0 g of the title compound.

$[\alpha]_D^{24} + 30.65$ ($c = 0.56$, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, $CDCl_3$) δ ppm:

6.80 - 7.80 (3H, multiplet);
 6.47 (2H, singlet);
 3.40 - 4.80 (8H, multiplet);
 3.84 & 3.86 (total 9H, each singlet);
 1.75 - 2.25 (2H, multiplet).

Infrared absorption spectrum ν_{\max} cm^{-1} (KBr): 3429, 2940, 2838, 1630, 1585.

Mass spectrometric analysis (EI) m/z : 469 (M^+)

76(e) 2-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethanol

0.88 ml (10.1 mmole) of oxalyl chloride was dissolved in 10 ml of methylene chloride, and 5 ml of a methylene chloride solution containing 0.79 ml (11.1 mmole) of dimethyl sulphoxide were added dropwise to the resulting solution at -78 °C under a nitrogen atmosphere. The mixture was then stirred for 30 minutes. 10 ml of a methylene chloride solution containing 950 mg (2.02 mmole) of 2-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethanol [prepared as described in step (d) above] were added dropwise to the resulting mixture, and the mixture was stirred for 4 hours. At the end of this time, a further 2.24 ml (16.2 mmole) of triethylamine was added, and the mixture was stirred at room temperature for 2 hours. The reaction mixture was then poured into water and extracted with methylene chloride. The organic extract was washed with water, and then with a saturated aqueous solution of sodium chloride, after which it was dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of methylene chloride and acetone ranging from 23 : 2 to 21 : 4 by volume as the eluent, to give 878 mg of the title compound.

$[\alpha]_D^{24} + 36.15$ ($c = 0.65$, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

9.56 (1H, singlet);
 6.90 - 7.80 (3H, multiplet);
 6.50 (2H, singlet);
 3.40 - 4.60 (6H, multiplet);
 3.85 - 3.87 (total 9H, each singlet);
 2.70 - 3.05 (2H, multiplet).

Infrared absorption spectrum ν_{\max} cm^{-1} (KBr):

2962, 2930, 2838, 1723, 1636, 1585.

Mass spectrometric analysis (FAB) m/z : 468 ($M + H$)⁺

76(f) 1-2-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethylspiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide

15.00 g (27.4 mmole) of 2-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethanol methanesulphonate [prepared as described in Example 70(e)], 7.76 g (30.1 mmole) of spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide hydrochloride (prepared as described in Preparation 6), 6.89 g (82.0 mmole) of sodium hydrogencarbonate, and 6.81 g (41.0 mmole) of potassium iodide were suspended in 150 ml of anhydrous dimethylformamide. The mixture was then heated at 80 °C for 8 hours under a nitrogen atmosphere. The reaction mixture was then poured into 400 ml of a saturated aqueous solution of sodium chloride and extracted with ethyl acetate. The organic extract was dried over anhydrous magnesium sulphate, and the solvent was removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of methylene chloride and methanol ranging from 40 : 1 to 20 : 1 by volume as the eluent, and then crystallized from hexane, to give 15.5 g of the title compound as white crystals.

$[\alpha]_D^{24} + 14.0$ ($c = 1$, methanol)

HPLC analysis

Column: YMC-Pack ODS-A (250 x 4.6 mm \varnothing)

Eluent: $\text{CH}_3\text{CN}:\text{H}_2\text{O} = 40:60$, 0.1% AcONH_4

Flow rate: 1.0 ml/min

Retention time: 23.7 min

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.1 - 7.8 (7H, multiplet);
 6.49 (2H, broad singlet);
 4.31 (1H, doublet, J = 16.8 Hz);
 3.99 (1H, doublet, J = 16.8 Hz);
 3.86 & 3.84 (total 9H, each singlet);
 3.3 - 4.0 (6H, multiplet);
 1.5 - 3.1 (12H, multiplet).

Infrared absorption spectrum ν_{\max} cm^{-1} (KBr):

2939, 1636, 1584, 1464, 1426, 1329, 1237, 1128.

Mass spectrometric analysis (FAB) m/z : 673 (M + H)⁺

Elemental analysis:					
Calculated for $\text{C}_{34}\text{H}_{38}\text{N}_2\text{O}_6\text{SCl}_2 \cdot \frac{1}{2}\text{H}_2\text{O}$:					
	C: 59.82%;	H: 5.76%;	N: 4.10%;	S: 4.70%;	Cl, 10.39%;
Found:	C: 60.20%;	H: 6.14%;	N: 4.04%;	S: 4.54%;	Cl, 10.38%.

76(g) 1-[2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide

150 mg (0.32 mmole) of [(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholine-2-yl]ethanol [prepared as described in step (e) above] and 99 mg (0.38 mmole) of spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide hydrochloride (prepared as described in Preparation 6) were dissolved in 1 ml of methanol. 100 mg of molecular sieves 3A (powder) and 209 mg (3.33 mmole) of sodium cyanoborohydride were added to the resulting solution, and the mixture was heated under reflux for 8 hours under a nitrogen atmosphere. The reaction mixture was then filtered through a Celite (trade mark) filter aid. The filtrate was poured into water and extracted with ethyl acetate. The organic extract was washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of methylene chloride and methanol ranging from 97 : 3 to 19 : 1 by volume as the eluent, to give 184 mg of the title compound. Various physico-chemical properties of this product agreed with those of the product synthesised as described in Example 76(f).

EXAMPLE 77

1-[2-[(2R)-(3,4-Dichlorophenyl)-4-[(3-isopropoxyphenyl)acetyl]morpholin-2-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide (Compound No. 3-811)

77(a) 2-[(2R)-(3,4-Dichlorophenyl)-4-[(3-isopropoxyphenyl)acetyl]morpholin-2-yl]ethanol

1.03 g (5.28 mmole) of 3-isopropoxyphenylacetic acid were dissolved in 50 ml of methylene chloride, and 1.10 g (5.76 mmole) of WSC-HCl (Water Soluble Carbodiimide-HCl), 780 mg (5.76 mmole) of 1-hydroxybenzotriazol-H₂O, 1.61 ml (11.5 mmole) of triethylamine, and 1.50 g (4.80 mmole) of (2R)-(3,4-dichlorophenyl)-2-(2-hydroxyethyl)morpholine hydrochloride [prepared as described in Example 76(c)] were added to the resulting solution, in that order. The mixture was then stirred at room temperature for 15 hours under a nitrogen atmosphere. At the end of this time, a saturated aqueous solution of ammonium chloride was added to the reaction mixture, which was then extracted with ethyl acetate. The organic extract was washed with a saturated aqueous solution of sodium hydrogencarbonate and with a saturated aqueous solution of sodium chloride, in that order, after which it was dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 3 : 1 to 2 : 1 by volume as the eluent, to give 1.81 g of the title compound.

$[\alpha]_D^{24}$ -8.2 (c = 0.60, methanol)

Nuclear Magnetic Resonance Spectrum (270 MHz, CDCl₃) δ ppm:

6.45 - 7.57 (7H, multiplet);

4.74 (1H, doublet, $J = 13.9$ Hz);
 4.37 - 4.52 (1H, multiplet);
 3.22 - 3.90 (9H, multiplet);
 2.10 - 2.21 (1H, broad singlet);
 1.87 - 2.09 (2H, multiplet);
 1.30 (3H, singlet);
 1.28 (3H, singlet).

Infrared absorption spectrum ν_{\max} cm^{-1} (KBr):

3693, 3622, 3589, 2981, 2934, 1645, 1608, 1583.

Mass spectrometric analysis (FAB) m/z : 452 ($M + H$)⁺

77(b) 2-[(2R)-(3,4-Dichlorophenyl)-4-[(3-isopropoxyphenyl)acetyl]morpholin-2-yl]ethanol methanesulphonate

1.81 g (4.00 mmole) of 2-[(2R)-(3,4-dichlorophenyl)-4-[(3-isopropoxyphenyl)acetyl]morpholin-2-yl]ethanol [prepared as described in step (a) above] were dissolved in 5 ml of pyridine, and 45 mg (0.40 mmole) of 4-dimethylaminopyridine and 0.46 ml (6.00 mmole) of methanesulphonyl chloride were added to the resulting solution, whilst ice-cooling. The mixture was then stirred at 0°C for 2 hours under a nitrogen atmosphere. At the end of this time, the reaction mixture was poured into ice-cooled 10% w/v aqueous hydrochloric acid, and then extracted with ethyl acetate. The organic extract was washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 1 : 1 to 1 : 2 by volume as the eluent, to give 2.00 g of the title compound as a colourless oil.

$[\alpha]_D^{24} -6.3$ ($c = 0.70$, methanol)

Nuclear Magnetic Resonance Spectrum (270 MHz, CDCl_3) δ ppm:

6.51 - 7.59 (7H, multiplet);
 4.40 - 4.63 (2H, multiplet);
 3.17 - 4.26 (9H, multiplet);
 2.93 (3H, singlet);
 2.08 - 2.32 (2H, multiplet);
 1.31 (3H, singlet);
 1.29 (3H, singlet).

Infrared absorption spectrum ν_{\max} cm^{-1} (KBr): 2981, 2934, 1645, 1608, 1583.

Mass spectrometric analysis (FAB) m/z : 530 ($M + H$)⁺

77(c) 1-[2-[(2R)-(3,4-Dichlorophenyl)-4-[(3-isopropoxyphenyl)acetyl]morpholin-2-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide

630 mg (1.19 mmole) of 2-[(2R)-(3,4-dichlorophenyl)-4-[(3-isopropoxyphenyl)acetyl]morpholin-2-yl]ethanol methanesulphonate [prepared as described in step (b) above], 367 mg (1.43 mmole) of spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide hydrochloride (prepared as described in Preparation 6), 299 mg (3.56 mmole) of sodium hydrogencarbonate, and 296 mg (1.78 mmole) of potassium iodide were suspended in 6 ml of anhydrous dimethylformamide, and the suspension was heated at 80°C for 6 hours under a nitrogen atmosphere. At the end of this time, the reaction mixture was poured into a saturated aqueous solution of sodium chloride and extracted with ethyl acetate. The organic extract was dried over anhydrous magnesium sulphate, and the solvent was removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a 25 : 1 by volume mixture of methylene chloride and methanol as the eluent, and then crystallized from hexane, to give 400 mg of the title compound as white crystals, melting at 85 - 88 °C.

$[\alpha]_D^{24} +2.5$ ($c = 0.51$, methanol)

HPLC analysis

Column: YMC-Pack ODS-A (250 x 4.6 mm ϕ)

Eluent: $\text{CH}_3\text{CN}:\text{H}_2\text{O} = 60:40$, 0.1% AcONH_4

Flow rate: 1.0 ml/minute

Retention time: 23.7 minute

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

6.55 - 7.61 (11H, multiplet);
 4.71 (1H, doublet, J = 13.8 Hz);
 4.40 - 4.51 (1H, multiplet);
 4.31 (1H, doublet, J = 16.8 Hz);
 3.99 (1H, doublet, J = 16.8 Hz);
 3.25 - 3.85 (8H, multiplet);
 2.56 - 2.97 (2H, multiplet);
 2.01 - 2.45 (6H, multiplet);
 1.88 - 2.45 (2H, multiplet);
 1.48 - 1.59 (1H, multiplet);
 1.30 (3H, singlet);
 1.29 (3H, singlet).

Infrared absorption spectrum ν_{max} cm^{-1} (KBr):
 2975, 2923, 1645, 1607, 1582, 1047.

Mass spectrometric analysis (FAB) m/z : 655 (M + H)⁺

Elemental analysis					
Calculated for $\text{C}_{35}\text{H}_{40}\text{N}_2\text{O}_4\text{SCl}_2 \cdot \frac{1}{2}\text{H}_2\text{O}$:					
	C: 63.25%;	H: 6.22%;	N: 4.21%;	S: 4.82%;	Cl: 10.67%;
Found:	C: 62.96%;	H: 6.38%;	N: 4.08%;	S: 4.71%;	Cl: 10.41%.

EXAMPLE 78

1-[2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)hexahydro-1,4-oxazepin-2-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide (Compound No. 3-74)

78(a) 4-(t-Butyldimethylsilyloxy)-(2R)-(3,4-dichlorophenyl)-1-[N-(t-butoxycarbonyl)-N-(3-hydroxypropyl)amino]-2-butanol

Following a procedure similar to that described in Example 76(a), but using 5.00 g (13.7 mmole) of 4-t-butyldimethylsilyloxy-(2R)-(3,4-dichlorophenyl)butane-1,2-diol [prepared as described in Example 1(c)] and 5.15 g (68.6 mmole) of 3-amino-1-propanol as the starting materials, 6.00 g of the title compound were obtained.

$[\alpha]_D^{24}$ -1.31 (c = 1.22, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.20 - 7.70 (3H, multiplet);
 5.04 & 5.32 (total 1H, each singlet);
 3.15 - 3.85 (9H, multiplet);
 1.95 - 2.30 (2H, multiplet);
 1.65 - 1.85 (2H, multiplet);
 1.45 (9H, singlet);
 0.86 (9H, singlet);
 -0.08 & -0.01 (total 6H, each singlet).

Infrared absorption spectrum ν_{max} cm^{-1} (CHCl_3): 3432, 2957, 2885, 2861, 1675.

Mass spectrometric analysis (FAB) m/z : 522 (M + H)⁺

78(b) 2-[4-t-Butoxycarbonyl-(2R)-(3,4-dichlorophenyl)hexahydro-1,4-oxazepin-2-yl]ethanol t-butyldimethylsilyl ether

300 mg (0.57 mmole) of 4-(t-butyldimethylsilyloxy)-(2R)-(3,4-dichlorophenyl)-1-[N-(t-butoxycarbonyl)-N-(3-hydroxypropyl)amino]-2-butanol [prepared as described in step (a) above] were dissolved in 2 ml of pyridine, and 196 mg (1.03 mmole) of p-toluenesulphonyl chloride were added to the resulting solution. The mixture was then stirred at room temperature for 16 hours under a nitrogen atmosphere. At the end of this time, the reaction mixture was poured into water

and extracted with ethyl acetate. The organic extract was washed with water and with a saturated aqueous solution of sodium chloride, in that order, after which it was dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was dissolved in 3 ml of 2-methyl-2-propanol, and 67 mg (0.58 mmole) of potassium t-butoxide were added to the resulting solution. The mixture was then heated at 80°C for 8 hours under a nitrogen atmosphere. At the end of this time, the reaction mixture was cooled to room temperature, poured into water, and then extracted with ethyl acetate. The organic extract was washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 47 : 3 to 23 : 2 by volume as the eluent, to give 56 mg of the title compound.

$[\alpha]_D^{24} + 14.19$ (c = 0.74, methanol)

Nuclear Magnetic Resonance Spectrum (270 MHz, CDCl_3) δ ppm:

7.17 - 7.65 (3H, multiplet);
3.10 - 4.10 (8H, multiplet);
1.75 - 2.30 (4H, multiplet);
1.37 & 1.44 (total 9H, each singlet);
0.82 (9H, singlet);
-0.07 & -0.05 (total 6H, each singlet).

Mass spectrometric analysis (FAB) m/z: 504 (M + H)⁺

78(c) 2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)hexahydro-1,4-oxazepin-2-yl]ethanol methanesulphonate

Following a procedure similar to that described in Examples 76(c), 76(d) and 70(e), but using 2-[4-t-butoxycarbonyl-(2R)-(3,4-dichlorophenyl)hexahydro-1,4-oxazepin-2-yl]ethanol t-butyldimethylsilyl ether [prepared as described in step (b) above], the title compound was obtained in a 65% yield.

$[\alpha]_D^{24} + 19.41$ (c = 0.45, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.20 - 7.65 (3H, multiplet);
6.62 (2H, singlet);
0.75 - 4.90 (12H, multiplet);
3.87 & 3.89 (total 9H, each singlet);
2.86 (3H, singlet).

Infrared absorption spectrum ν_{max} cm^{-1} (KBr): 2935, 1637, 1585.

Mass spectrometric analysis (FAB) m/z: 562 (M + H)⁺

78(d) 1-[2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)hexahydro-1,4-oxazepin-2-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide

Following a procedure similar to that described in Example 76(f), but using 2-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)hexahydro-1,4-oxazepin-2-yl]ethanol methanesulphonate [prepared as described in step (c) above], the title compound was obtained in a 59% yield.

$[\alpha]_D^{24} + 19.33$ (c = 0.1, methanol)

HPLC analysis

Column: YMC-Pack ODS-A (250 x 4.6 mm \varnothing)
Eluent: $\text{CH}_3\text{CN}:\text{H}_2\text{O}$ = 40:60, 0.1% AcONH_4
Flow rate: 1.0 ml/minute
Retention time: 17.7 minute

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.15 - 7.75 (7H, multiplet);
6.62 (2H, broad singlet);
0.75 - 4.80 (29H, multiplet);

4.29 (1H, doublet, J = 17 Hz);

3.97 (1H, doublet, J = 17 Hz).

Infrared absorption spectrum ν_{\max} cm^{-1} (KBr): 2928, 2855, 2836, 1637, 1584.

Mass spectrometric analysis (FAB) m/z : 687 (M + H)⁺

EXAMPLE 79

1-[3-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]propyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide (Compound No. 3-42)

79(a) Methyl 4-(3,4-dichlorophenyl)-4-oxobutanoate

8.50 g (84.9 mmole) of succinic anhydride and 24.8 g (93.0 mmole) of aluminium bromide were added, in that order, to 150 ml of 1,2-dichlorobenzene, and the mixture was stirred at room temperature for 5 hours. At the end of this time, the reaction mixture was poured into ice-cold water and extracted with methylene chloride. The organic extract was washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was dissolved in 100 ml of methanol. 1.0 ml of sulphuric acid was added to the resulting solution, and the mixture was heated under reflux for 4 hours. At the end of this time, the reaction mixture was cooled to room temperature, poured into water, and then extracted with ethyl acetate. The organic extract was washed with a saturated aqueous solution of sodium hydrogencarbonate and with a saturated aqueous solution of sodium chloride, in that order, after which it was dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and diethyl ether ranging from 17 : 3 to 7 : 3 by volume as the eluent, to give 9.10 g of the title compound as pale orange crystals.

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

8.07 (1H, doublet, J = 2 Hz);

7.81 (1H, doublet of doublets, J = 2 & 8 Hz);

7.56 (1H, doublet, J = 8 Hz);

3.71 (3H, singlet);

3.27 (2H, triplet, J = 7 Hz);

2.78 (2H, triplet, J = 7 Hz).

Infrared absorption spectrum ν_{\max} cm^{-1} (KBr):

3093, 3061, 2954, 1746, 1678, 1583.

Mass spectrometric analysis (EI) m/z : 260 (M⁺)

79(b) Methyl 4-(3,4-dichlorophenyl)-4-pentenoate

1.75 g (49.0 mmole) of methyltriphenylphosphonium bromide and 5.50 g (49.0 mmole) of potassium t-butoxide were suspended in 200 ml of dried benzene, and the mixture was stirred at room temperature for 6 hours under a nitrogen atmosphere. At the end of this time, 8.50 g of methyl 4-(3,4-dichlorophenyl)-4-oxobutanoate [prepared as described in step (a) above] were dissolved in 40 ml of benzene, and the resulting solution was added to the reaction mixture. The mixture was then stirred for 1 hour. The reaction mixture was then poured into water and extracted with ethyl acetate. The organic extract was dried over anhydrous sodium sulphate, and the solvent was removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and diethyl ether ranging from 19 : 1 to 23 : 2 by volume as the eluent, to give 4.20 g of the title compound as a pale orange oil.

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.48 (1H, doublet, J = 2 Hz);

7.40 (1H, doublet, J = 8 Hz);

7.23 (1H, doublet of doublets, J = 2 & 8 Hz);

5.32 (1H, singlet);

5.14 (1H, singlet);

3.67 (3H, singlet);

2.79 (2H, triplet, J = 8 Hz);

2.48 (2H, triplet, J = 8 Hz).

Infrared absorption spectrum ν_{\max} cm^{-1} (film): 2952, 1740, 1630, 1550.
Mass spectrometric analysis (EI) m/z : 258 (M^+)

79(c) 4-(3,4-Dichlorophenyl)-4-penten-1-ol t-butyldimethylsilyl ether

5

Following a procedure similar to that described in Example 1(b), but using methyl 4-(3,4-dichlorophenyl)-4-pentenoate [prepared as described in step (b) above], the title compound was obtained in a 93% yield.

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

10 7.49 (1H, doublet, $J = 2$ Hz);
7.38 (1H, doublet, $J = 9$ Hz);
7.24 (1H, doublet of doublets, $J = 2$ & 9 Hz);
5.30 (1H, singlet);
5.13 (1H, doublet, $J = 1$ Hz);
15 3.62 (2H, triplet, $J = 6$ Hz);
2.52 (2H, triplet, $J = 8$ Hz);
1.60 - 1.68 (2H, multiplet);
0.90 (9H, singlet);
0.04 (6H, singlet).

20

Infrared absorption spectrum ν_{\max} cm^{-1} (film):

2954, 2929, 2887, 2858, 1627, 1550.

Mass spectrometric analysis (FAB) m/z : 345 ($M + H$)⁺

79(d) (2R)-5-t-Butyldimethylsilyloxy-2-(3,4-dichlorophenyl)pentane-1,2-diol

Following a procedure similar to that described in Example 1(c), but using 4-(3,4-dichlorophenyl)-4-penten-1-ol t-butyldimethylsilyl ether [prepared as described in step (c) above], the title compound was obtained in a 94% yield.

Optical purity: 98% ee

30 $[\alpha]_D^{24}$ -2.08 ($c = 0.48$, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.56 (1H, doublet, $J = 2$ Hz);
7.41 (1H, doublet, $J = 8$ Hz);
35 7.23 (1H, doublet of doublets, $J = 2$ & 8 Hz);
4.96 (1H, singlet);
3.53 - 3.70 (4H, multiplet);
1.98 - 2.14 (3H, multiplet);
1.35 - 1.57 (2H, multiplet);
40 0.91 (9H, singlet);
0.082 (3H, singlet);
0.078 (3H, singlet).

Infrared absorption spectrum ν_{\max} cm^{-1} (CHCl_3): 3584, 3311, 2956, 2932, 2861.

45 Mass spectrometric analysis (FAB) m/z : 379 (M^+)

79(e) (2R)-5-(t-Butyldimethylsilyloxy)-2-(3,4-dichlorophenyl)-1-[N-(t-butoxycarbonyl)-N-(2-hydroxyethyl)amino]-2-pentanol

50 Following a procedure similar to that described in Example 76(a), but using (2R)-5-t-butyldimethylsilyloxy-2-(3,4-dichlorophenyl)pentane-1,2-diol [prepared as described in step (d) above], the title compound was obtained in a 95% yield.

$[\alpha]_D^{24}$ -14.75 ($c = 0.61$, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

55

7.15 - 7.65 (3H, multiplet);
5.30 & 5.79 (total 1H, each singlet);
2.50 - 3.95 (9H, multiplet);
1.85 - 2.25 (2H, multiplet);

1.30 - 1.60 (2H, multiplet);
 1.43 (9H, singlet);
 0.89 (9H, singlet);
 0.04 & 0.05 (total 6H, each singlet).

Infrared absorption spectrum ν_{\max} cm^{-1} (KBr):
 3355, 2955, 2931, 2894, 2858, 1668.
 Mass spectrometric analysis (FAB) m/z : 522 (M + H)⁺

79(f) (2R)-3-[4-t-butoxycarbonyl-2-(3,4-dichlorophenyl)morpholin-2-yl]-1-propanol t-butyldimethylsilyl ether

Following a procedure similar to that described in Example 76(b), but using (2R)-5-(t-butyldimethylsilyloxy)-2-(3,4-dichlorophenyl)-1-[N-(t-butoxycarbonyl)-N-(2-hydroxyethyl)amino]-2-pentanol [prepared as described in step (e) above], the title compound was obtained in a 92% yield.

$[\alpha]_D^{24} +58.15$ (c = 0.54, methanol)
 Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.40 - 7.65 (3H, multiplet);
 4.14 (1H, doublet, J = 14 Hz);
 3.42 - 3.75 (5H, multiplet);
 3.23 (2H, doublet, J = 14 Hz);
 1.15 - 2.00 (4H, multiplet);
 1.44 & 1.52 (total 9H, each broad singlet);
 0.85 (9H, singlet);
 0.00 & 0.01 (total 6H, each singlet).

Infrared absorption spectrum ν_{\max} cm^{-1} (CHCl_3): 2957, 2931, 2860, 1668.
 Mass spectrometric analysis (FAB) m/z : 504 (M + H)⁺

79(g) 3-[(2R)-3-(4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]-1-propanol

3.43 g (6.80 mmole) of (2R)-3-[4-t-butoxycarbonyl-2-(3,4-dichlorophenyl)morpholin-2-yl]-1-propanol t-butyldimethylsilyl ether [prepared as described in step (f) above] were dissolved in 60 ml of methylene chloride, and 2.98 g (15.0 mmole) of B-bromocatecholborane were added to the resulting solution. The mixture was then stirred at room temperature for 2 hours under a nitrogen atmosphere. At the end of this time, 60 ml of water were poured into the reaction mixture, which was then stirred for a further 2 hours. The mixture was then made basic by the addition of a 1 N aqueous solution of sodium hydroxide and then extracted with methylene chloride. The organic extract was washed with a saturated aqueous solution of sodium chloride and dried over anhydrous sodium sulphate. The solvent was removed by distillation under reduced pressure. The resulting residue was dissolved in 40 ml of methylene chloride, and 1.23 ml (8.87 mmole) of triethylamine, 1.65 g (7.15 mmole) of 3,4,5-trimethoxybenzoyl chloride and 10 mg of 4-dimethylaminopyridine were added to the resulting solution. The mixture was then stirred at room temperature for 12 hours. At the end of this time, the reaction mixture was poured into water and extracted with methylene chloride. The organic extract was washed with a saturated aqueous solution of sodium chloride and dried over anhydrous sodium sulphate, and the solvent was removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a 7 : 3 by volume mixture of methylene chloride and acetone as the eluent, to give 2.13 g of the title compound.

$[\alpha]_D^{24} +30.78$ (c = 0.51, methanol)
 Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

6.80 - 7.80 (3H, multiplet);
 6.48 (2H, broad singlet);
 3.30 - 4.80 (8H, multiplet);
 3.84 & 3.86 (total 9H, each singlet);
 1.10 - 2.35 (4H, multiplet).

Infrared absorption spectrum ν_{\max} cm^{-1} (KBr): 3426, 2942, 2872, 1632, 1584.
 Mass spectrometric analysis (FAB) m/z : 484 (M + H)⁺

79(h) 3-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]-1-propanol methanesulphonate

Following a procedure similar to that described in Example 70(e), but using 3-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]-1-propanol [prepared as described in step (g) above], the title compound was obtained in a 84% yield.

$[\alpha]_D^{24} + 27.87$ (c = 0.54, methanol)

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

6.80 - 7.80 (3H, multiplet);
6.50 (2H, singlet);
3.20 - 4.50 (8H, multiplet);
3.85 & 3.86 (total 9H, each singlet);
2.97 (3H, singlet);
1.35 - 2.35 (4H, multiplet).

Infrared absorption spectrum ν_{max} cm^{-1} (KBr):

3001, 2939, 2875, 2839, 1634, 1585.

Mass spectrometric analysis (FAB) m/z: 562 (M + H)⁺

79(i) 1-[3-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]propyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide

Following a procedure similar to that described in Example 76(g), but using 3-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]-1-propanol methanesulphonate [prepared as described in step (h) above], the title compound was obtained in a 68% yield.

$[\alpha]_D^{24} + 26.97$ (c = 0.55, methanol)

HPLC analysis

Column: YMC-Pack ODS-A (250 x 4.6 mm \varnothing)

Eluent: $\text{CH}_3\text{CN}:\text{H}_2\text{O}$ = 40:60, 0.1% AcONH_4

Flow rate: 1.0 ml/minute

Retention time: 23.4 minute

Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

6.80 - 7.80 (7H, multiplet);
6.48 (2H, broad singlet);
0.80 - 4.70 (20H, multiplet);
4.32 (1H, doublet, J = 17 Hz);
4.00 (1H, doublet, J = 17 Hz);
3.84 & 3.86 (total 9H, each singlet).

Infrared absorption spectrum ν_{max} cm^{-1} (KBr):

2940, 2872, 2834, 2771, 1636, 1584.

Mass spectrometric analysis (FAB) m/z: 687 (M + H)⁺

EXAMPLE 801-[2-[(5R)-(3,4-Dichlorophenyl)-3-(3,4-dimethoxybenzenesulphonyl)oxazolidin-5-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide (Compound No. 3-2055)80(a) 2-[(5R)-(3,4-Dichlorophenyl)-3-(3,4-dimethoxybenzenesulphonyl)oxazolidin-5-yl]ethanol t-butyl dimethylsilyl ether

1.00 g (2.72 mmole) of 2-[(5R)-(3,4-dichlorophenyl)oxazolidin-5-yl]ethanol t-butyl dimethylsilyl ether [prepared as described in the first part of Example 1(f)] was dissolved in 10 ml of pyridine, and 773 mg (3.27 mmole) of 3,4-dimethoxybenzenesulphonyl chloride were added to the resulting solution, whilst ice-cooling. The mixture was then stirred for 2 hours under a nitrogen atmosphere. At the end of this time, the reaction mixture was poured into 100 ml of ice-cooled 10% w/v aqueous hydrochloric acid, and then extracted with ethyl acetate. The organic extract was washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous magnesium sulphate. The solvent was

removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 10 : 1 to 2 : 1 by volume as the eluent, to give 1.27 g of the title compound as white crystals.

$[\alpha]_D^{24}$ -5.74 (c = 1.29, methanol).

5 Infrared absorption spectrum ν_{max} , cm^{-1} (KBr):
1588, 1510, 1468, 1264, 1155, 1140.

80(b) 2-[(5R)-(3,4-Dichlorophenyl)-3-(3,4-dimethoxybenzenesulphonyl)oxazolidin-5-yl]ethanol methanesulphonate

10 1.19 g (2.06 mmole) of 2-[(5R)-(3,4-dichlorophenyl)-3-(3,4-dimethoxybenzenesulphonyl)oxazolidin-5-yl]ethanol t-butyltrimethylsilyl ether [prepared as described in step (a) above] were dissolved in 20 ml of a 3 : 3 : 1 by volume mixture of acetic acid, tetrahydrofuran and water, and the resulting mixture was then heated at 80°C for 2 hours under a nitrogen atmosphere. At the end of this time, the reaction mixture was then neutralised with a saturated aqueous solution of sodium hydrogencarbonate and extracted with ethyl acetate. The organic extract was dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was dissolved in 10 ml of pyridine. 23 mg (0.19 mmole) of 4-dimethylaminopyridine and 0.22 ml (2.84 mmole) of methanesulphonyl chloride were then added to the resulting solution, whilst ice-cooling. The mixture was then stirred for 2 hours at 0°C under a nitrogen atmosphere. At the end of this time, the reaction mixture was poured into 200 ml of ice-cooled 10% w/v aqueous hydrochloric acid, and then extracted with ethyl acetate. The organic extract was washed with a saturated aqueous solution of sodium chloride and then dried over anhydrous magnesium sulphate. The solvent was removed by distillation under reduced pressure, and the resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of hexane and ethyl acetate ranging from 2 : 1 to 1 : 2 by volume as the eluent, to give 992 mg of the title compound as white crystals.

$[\alpha]_D^{24}$ -3.80 (c = 0.5, methanol).

25 Nuclear Magnetic Resonance Spectrum (400 MHz, CDCl_3) δ ppm:

7.33 (1H, doublet, J = 8.6 Hz);
7.30 (1H, doublet of doublets, J = 8.6 & 2.1 Hz);
7.14 (1H, doublet, J = 2.2 Hz);
30 7.11 (1H, doublet, J = 2.1 Hz);
6.92 (1H, doublet of doublets, J = 8.7 & 2.2 Hz);
6.80 (1H, doublet, J = 8.7 Hz);
5.08 (1H, doublet, J = 5.7 Hz);
4.98 (1H, doublet, J = 5.7 Hz);
35 4.11 (1H, multiplet);
3.94 (3H, singlet);
3.86 (3H, singlet);
3.82 (1H, multiplet);
3.70 (2H, AB-quartet, J = 11.3 Hz, $\Delta\delta$ = 0.08 ppm);
40 2.88 (3H, singlet);
2.16 (2H, multiplet).

Mass spectrometric analysis (FAB) m/z : 540 ($M+H$)⁺

45 80(c) 1-[2-[(5R)-(3,4-Dichlorophenyl)-3-(3,4-dimethoxybenzenesulphonyl)oxazolidin-5-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide

105 mg (0.19 mmole) of 2-[(5R)-(3,4-dichlorophenyl)-3-(3,4-dimethoxybenzenesulphonyl)oxazolidin-5-yl]ethanol methanesulphonate [prepared as described in step (b) above], 55 mg (0.21 mmole) of spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide hydrochloride (prepared as described in Preparation 6), 49 mg (0.58 mmole) of sodium hydrogencarbonate, and 48 mg (0.29 mmole) of potassium iodide were suspended in 2 ml of anhydrous dimethylformamide. The resulting mixture was then heated at 80°C for 8 hours under a nitrogen atmosphere. At the end of this time, the reaction mixture was poured into 10 ml of a saturated aqueous solution of sodium chloride and extracted with ethyl acetate. The organic extract was dried over anhydrous magnesium sulphate, and the solvent was removed by distillation under reduced pressure. The resulting residue was purified by silica gel column chromatography, using a gradient elution method, with mixtures of methylene chloride and methanol ranging from 40 : 1 to 20 : 1 by volume as the eluent, and then crystallized from diisopropyl ether, to give 82 mg of the title compound as white crystals.

$[\alpha]_D^{24}$ +2.5 (c = 0.52, methanol).

HPLC analysis

Column: YMC-Pack ODS-A (250 x 4.6 mm \varnothing)

Eluent: CH₃CN:H₂O = 40:60, 0.1% AcONH₄

Flow rate: 1.0 ml/minute

Retention time: 21.4 minute

Infrared absorption spectrum ν_{\max} cm⁻¹ (KBr):

1674, 1587, 1509, 1469, 1350, 1264, 1155, 1140, 1039.

Mass spectrometric analysis (FAB) m/z: 665 (M+H)⁺

EXAMPLE 81

1-[2-[(2R)-(3,4-Dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]-1-methylspiro[benzo[c]thiophene-1(3H),4'-piperidinium]-(2S)-oxide iodide (the methyl iodide salt of Compound No. 3-42)

300 mg (0.45 mmole) of 1-[2-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl]spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide (prepared as described in Example 76) were dissolved in 3 ml of acetonitrile, and 30 μ l (0.48 mmole) of methyl iodide were added to the resulting solution. The mixture was then stirred overnight at room temperature under a nitrogen atmosphere. At the end of this time, the solvent was removed by distillation under reduced pressure. The resulting residue was crystallized from diisopropyl ether, to give

312 mg of the title compound as pale-yellow crystals.

$[\alpha]_D^{24} +42.0$ (c = 1.0, methanol).

HPLC analysis

Column: YMC-Pack ODS-A (250 x 4.6 mm \varnothing)

Eluent: CH₃CN:H₂O = 40:60, 0.1% AcONH₄

Flow rate: 1.0 ml/minute

Retention time: 9.9 minute

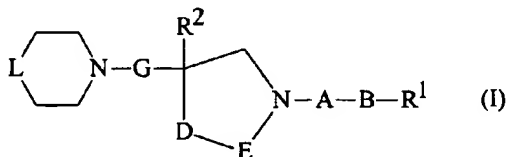
Infrared absorption spectrum ν_{\max} cm⁻¹ (KBr): 3444, 1632, 1584, 1464, 1126.

Mass spectrometric analysis (FAB) m/z: 687 (free form, M⁺)

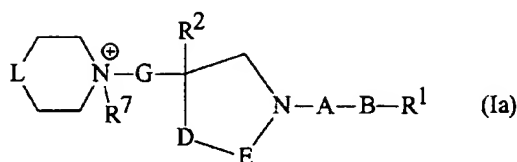
Elemental analysis:						
Calculated for C ₃₅ H ₄₁ N ₂ O ₆ SCl ₂ I:						
	C: 51.54%;	H: 5.07%;	N: 3.44%;	S: 3.93%;	Cl: 8.69%;	I: 15.56%.
Found:	C: 51.14%;	H: 5.39%;	N: 3.42%;	S: 4.01%;	Cl: 8.50%;	I: 15.96%.

Claims

1. Compounds of formula (I):



and the quaternary ammonium derivative thereof of formula (Ia):



in which:

15 R^1 and R^2 are the same as or different from each other, and each represents a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said heterocyclic group being unsubstituted or being substituted by at least one of substituents α , defined below;

A represents a methylene group, a carbonyl group or a sulphonyl group;

20 B represents a single bond between the groups represented by A and R^1 , an alkylene group having from 1 to 4 carbon atoms or an alkenylene group having from 2 to 4 carbon atoms;

D represents an oxygen or sulphur atom;

25 E represents an alkylene group having from 1 to 6 carbon atoms, a haloalkylene group having from 1 to 6 carbon atoms, a cycloalkane-1,1-diyl group having from 3 to 6 carbon atoms, a cycloalkane-1,1-diylmethyl group having from 3 to 6 carbon atoms in the cycloalkane part, or a cycloalkane-1,1-diyl(methyl) group having from 3 to 6 carbon atoms in the cycloalkane part;

30 G represents an alkylene group having from 1 to 4 carbon atoms or an alkenylene group having from 2 to 4 carbon atoms;

L represents a group of formula $-N(R^3)-$ or a group of formula $-C(R^4)(R^5)-$
in which

35 R^3 represents a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one of substituents α , defined below,

40 R^4 represents a hydrogen atom, a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one of substituents α , defined below, and

45 R^5 represents a group of formula $-CO-R^6$, an alkyl group having from 1 to 6 carbon atoms, an alkoxy group having from 1 to 6 carbon atoms, an amino group, an acylamino group, an alkyl group which has from 1 to 6 carbon atoms and which is substituted by an acylamino group, an acylamino group whose nitrogen atom is substituted with an alkyl group having from 1 to 6 carbon atoms, a hydroxy group, a hydroxyalkyl group having from 1 to 6 carbon atoms, an alkoxyalkyl group in which the alkoxy and alkyl parts each have from 1 to 6 carbon atoms, or an aralkoxyalkyl group having from 1 to 6 carbon atoms in the oxyalkyl part, and
50 in which the aralkyl part is an alkyl group which has from 1 to 4 carbon atoms and which is substituted by from 1 to 3 carbocyclic aryl groups which are unsubstituted or which are substituted by at least one of substituents α , defined below,

55 in which R^6 represents an alkyl group having from 1 to 6 carbon atoms, an alkoxy group having from 1 to 6 carbon atoms, a group of formula $-NR^8R^9$, a carbocyclic aryl group or a heterocyclic group, said aryl group and said heterocyclic group being unsubstituted or being substituted by at least one of substituents α , defined below

in which R^8 represents a hydrogen atom, an alkyl group having from 1 to 6 carbon atoms, an

alkoxy group having from 1 to 6 carbon atoms, an aliphatic carboxylic acyl group having from 1 to 6 carbon atoms, an alkanesulphonyl group having from 1 to 6 carbon atoms, a haloalkanesulphonyl group having from 1 to 6 carbon atoms, a cycloalkyl group having from 3 to 8 carbon atoms, a carbocyclic aryl group which is unsubstituted or which is substituted by at least one of substituents α , defined below, or an aralkyl group in which an alkyl group having from 1 to 4 carbon atoms is substituted by from 1 to 3 carbocyclic aryl groups as defined above, and

R^b represents a hydrogen atom, an alkyl group having from 1 to 6 carbon atoms, an alkoxy group having from 1 to 6 carbon atoms, an aliphatic carboxylic acyl group having from 1 to 6 carbon atoms, an alkanesulphonyl group having from 1 to 6 carbon atoms, a haloalkanesulphonyl group having from 1 to 6 carbon atoms, a cycloalkyl group having from 3 to 8 carbon atoms, a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one of substituents α , defined below, or an aralkyl group in which an alkyl group having from 1 to 4 carbon atoms is substituted by from 1 to 3 carbocyclic aryl groups as defined above,

or

R^a and R^b together with the nitrogen atom to which they are attached represent a nitrogen-containing heterocyclic group,

R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group having from 5 to 10 ring atoms, said group being unsubstituted or being substituted by at least one of substituents β , defined below, and said heterocyclic group having a single nitrogen and/or oxygen and/or sulphur hetero-atom, or R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group as defined above which is fused to a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one of substituents α , defined below;

R^7 represents an alkyl group having from 1 to 6 carbon atoms; and

said substituents α are selected from halogen atoms, alkyl groups having from 1 to 6 carbon atoms, haloalkyl groups having from 1 to 6 carbon atoms, alkoxy groups having from 1 to 6 carbon atoms, aliphatic carboxylic acyl groups having from 1 to 6 carbon atoms, alkanesulphonyl groups having from 1 to 6 carbon atoms, haloalkanesulphonyl groups having from 1 to 6 carbon atoms, hydroxy groups, carboxy groups, alkoxycarbonyl groups having from 1 to 6 carbon atoms in the alkoxy part, acylamino groups having from 1 to 6 carbon atoms, alkanesulphonylamino groups having from 1 to 6 carbon atoms, haloalkanesulphonylamino groups having from 1 to 6 carbon atoms, amino groups, cyano groups, and alkylene groups having from 1 to 8 carbon atoms (to form a cycloalkyl group fused with the aryl or heterocyclic ring);

said substituents β are:

when substituting a carbon atom, oxo groups,

when substituting a nitrogen atom, selected from aliphatic acyl groups, alkanesulphonyl groups having from 1 to 6 carbon atoms, alkyl groups having from 1 to 6 carbon atoms which are unsubstituted or are substituted by at least one of substituents γ , defined below, carbocyclic aryl groups which are unsubstituted or are substituted by at least one of substituents α , defined above, and aralkyl groups in which an alkyl group having from 1 to 4 carbon atoms is substituted by from 1 to 3 carbocyclic aryl groups as defined above,

and, when substituting a sulphur atom, one or two oxygen atoms to form a sulfoxide or sulphone group; and

said substituents γ are selected from halogen atoms, alkoxy groups having from 1 to 6 carbon atoms, aliphatic carboxylic acyl groups having from 1 to 6 carbon atoms, alkanesulphonyl groups having from 1 to 6 carbon atoms, haloalkanesulphonyl groups having from 1 to 6 carbon atoms, hydroxy groups, carboxy groups, alkoxycarbonyl groups having from 1 to 6 carbon atoms in the alkoxy part, acylamino groups having from 1 to 6 carbon atoms, amino groups, and cyano groups;

and pharmaceutically acceptable salts and esters thereof.

2. A compound according to Claim 1, in which E represents a methylene group.

3. A compound according to Claim 2, in which R^1 and R^2 are the same or different and each represents a carbocyclic aryl group, an aromatic heterocyclic group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α .

4. A compound according to Claim 2, in which R^2 represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α .

5. A compound according to Claim 2, in which A represents a carbonyl group.

6. A compound according to Claim 2, in which B is a single bond.

7. A compound according to Claim 2, in which D is an oxygen atom.

8. A compound according to Claim 2, in which G is an alkylene group having from 1 to 4 carbon atoms.

9. A compound according to Claim 2, in which G is an alkylene group having 2 or 3 carbon atoms.

10. A compound according to Claim 2, in which R^3 represents an aromatic heterocyclic group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α .

11. A compound according to Claim 2, in which L represents a group of formula $-C(R^4)(R^5)-$.

12. A compound according to Claim 2, in which R^4 represents a carbocyclic aryl group or an aromatic heterocyclic group.

13. A compound according to Claim 2, in which R^5 represents a group of formula $-CO-R^6$ where R^6 represents an alkyl group having from 1 to 6 carbon atoms or a group of formula $-NR^aR^b$.

14. A compound according to Claim 2, in which R^5 represents an amino group, an acylamino group or a hydroxy group.

15. A compound according to Claim 2, in which R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group having from 5 to 10 ring atoms, said group being unsubstituted or being substituted by at least one of substituents β , and said heterocyclic group having a single nitrogen and/or oxygen and/or sulphur hetero-atom, or R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group as defined above which is fused to a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α .

16. A compound according to Claim 2, in which:

R^1 and R^2 are the same or different and each represents a carbocyclic aryl group, an aromatic heterocyclic group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α ;

A represents a carbonyl group;

B is a single bond;

D is an oxygen atom;

G is an alkylene group having from 1 to 4 carbon atoms;

L represents a group of formula $-C(R^4)(R^5)-$;

R^4 represents a carbocyclic aryl group or an aromatic heterocyclic group; and

R^5 represents a group of formula $-CO-R^6$ where R^6 represents an alkyl group having from 1 to 6 carbon atoms

or a group of formula $-NR^aR^b$.

17. A compound according to Claim 2, in which:

R^1 and R^2 are the same or different and each represents a carbocyclic aryl group, an aromatic heterocyclic group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α ;

A represents a carbonyl group;

B is a single bond;

D is an oxygen atom;

G is an alkylene group having from 1 to 4 carbon atoms;

L represents a group of formula $-C(R^4)(R^5)-$; and

R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group having from 5 to 10 ring atoms, said group being unsubstituted or being substituted by at least one of substituents β , and said heterocyclic group having a single nitrogen and/or oxygen and/or sulphur hetero-atom, or R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group as defined above which is fused to a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α .

18. A compound according to Claim 1, in which E represents a group of formula $-(CH_2)_n-$ in which n is an integer from 2 to 4.

19. A compound according to Claim 18, in which R^1 and R^2 are the same or different and each represents a carbocyclic aryl group, an aromatic heterocyclic group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α .

20. A compound according to Claim 18, in which R^2 represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α .

21. A compound according to Claim 18, in which A represents a carbonyl group.

22. A compound according to Claim 18, in which B represents a single bond.

23. A compound according to Claim 18, in which D represents an oxygen atom.

24. A compound according to Claim 18, in which G represents an alkylene group having 1 to 4 carbon atoms.

25. A compound according to Claim 18, in which G represents an alkylene group having 2 to 3 carbon atoms.

26. A compound according to Claim 18, in which R^3 represents an aromatic heterocyclic group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α .

27. A compound according to Claim 18, in which L represents a group of the general formula $-C(R^4)(R^5)-$.

28. A compound according to Claim 18, in which R^4 represents a carbocyclic aryl group or an aromatic heterocyclic group.

29. A compound according to Claim 18, in which R^5 represents a group of formula $-CO-R^6$ in which R^6 represents an alkyl group having from 1 to 6 carbon atoms or a group of formula $-NR^aR^b$.

30. A compound according to Claim 18, in which R^5 represents an amino group, an acylamino group or a hydroxy group.

31. A compound according to Claim 18, in which R^4 and R^5 together with the carbon atom to which they are attached

represent a cycloalkyl or heterocyclic group having from 5 to 10 ring atoms, said group being unsubstituted or being substituted by at least one of substituents β , and said heterocyclic group having a single nitrogen and/or oxygen and/or sulphur hetero-atom, or R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group as defined above which is fused to a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α .

32. A compound according to Claim 18, in which n is 2 or 3.

33. A compound according to Claim 18, in which n is 2.

34. A compound according to Claim 18, in which:

R^1 and R^2 are the same or different and each represents a carbocyclic aryl group, an aromatic heterocyclic group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α ;

A represents a carbonyl group;

B represents a single bond;

D represents an oxygen atom;

G represents an alkylene group having 1 to 4 carbon atoms;

L represents a group of the general formula $-C(R^4)(R^5)-$;

R^4 represents an aryl group or an aromatic heterocyclic group;

R^5 represents a group of formula $-CO-R^6$ in which R^6 represents an alkyl group having from 1 to 6 carbon atoms or a group of formula $-NR^aR^b$; and

n is 2 or 3.

35. A compound according to Claim 18, in which:

R^1 and R^2 are the same or different and each represents a carbocyclic aryl group, an aromatic heterocyclic group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α ;

A represents a carbonyl group;

B represents a single bond;

D represents an oxygen atom;

G represents an alkylene group having 1 to 4 carbon atoms;

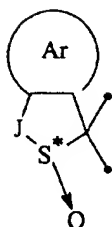
L represents a group of the general formula $-C(R^4)(R^5)-$;

R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group having from 5 to 10 ring atoms, said group being unsubstituted or being substituted by at least one of substituents β , and said heterocyclic group having a single nitrogen and/or oxygen and/or sulphur hetero-atom, or R^4 and R^5 together with the carbon atom to which they are attached represent a cycloalkyl or heterocyclic group as defined above which is fused to a carbocyclic aryl group or an aromatic heterocyclic group, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α ; and

n is 2 or 3.

36. A compound according to Claim 1, in which R^4 and R^5 together with the carbon atom to which they are attached

represent a group of formula:



in which

J represents an alkylene group having from 1 to 6 carbon atoms;

Ar represents a ring carbocyclic aryl group or aromatic heterocyclic group fused to the ring containing J and S, said aryl group and said aromatic heterocyclic group being unsubstituted or being substituted by at least one substituent preferably selected from substituents α , defined above; and

$S^* \rightarrow O$ represents a sulfoxide group in which the sulphur atom is in the S -configuration.

37. A compound according to Claim 36, in which R^1 represents a carbocyclic aryl group, an aromatic heterocyclic group, or a carbocyclic aryl group substituted with from 1 to 3 of substituents α .
38. A compound according to Claim 36, in which R^1 represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α^1 ; and substituents α^1 are selected from alkyl groups having from 1 to 6 carbon atoms, haloalkyl groups having from 1 to 6 carbon atoms, and alkoxy groups having from 1 to 6 carbon atoms.
39. A compound according to Claim 36, in which R^2 represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α .
40. A compound according to Claim 36, in which R^2 represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 halogen atoms.
41. A compound according to Claim 36, in which A represents a carbonyl group.
42. A compound according to Claim 36, in which B represents a single bond.
43. A compound according to Claim 36, in which D represents an oxygen atom.
44. A compound according to Claim 36, in which E represents a C_{1-4} alkylene group or a C_{3-8} alkylene group which contains a C_{3-6} cycloalkane-1,1-diyl group.
45. A compound according to Claim 36, in which E represents a methylene, ethylene, dimethylmethylene, 1,1-dimethylethylene, 2,2-dimethylethylene, cyclopropane-1,1-diyl, cyclobutane-1,1-diyl, cyclopentane-1,1-diyl, cyclohexane-1,1-diyl, cyclopropane-1,1-diylmethyl, cyclobutane-1,1-diylmethyl, cyclopentane-1,1-diylmethyl or cyclohexane-1,1-diylmethyl group.
46. A compound according to Claim 36, in which G represents a C_{1-4} alkylene group.
47. A compound according to Claim 36, in which G represents a C_{2-3} alkylene group.
48. A compound according to Claim 36, in which J represents a C_{1-4} alkylene group.

49. A compound according to Claim 36, in which J represents a methylene or ethylene group.

50. A compound according to Claim 36, in which the ring Ar represents an aryl group, an aryl group substituted with from 1 to 3 of substituents α or an aromatic heterocyclic group.

51. A compound according to Claim 36, in which the ring Ar represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α .

52. A compound according to Claim 36, in which:

R¹ represents an aryl group, an aromatic heterocyclic group, or a carbocyclic aryl group substituted with from 1 to 3 of substituents α ;

R² represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α ;

A represents a carbonyl group;

B represents a single bond;

D represents an oxygen atom;

E represents a C₁₋₄ alkylene group or a C₃₋₈ alkylene group which contains a C₃₋₆ cycloalkane-1,1-diyl group;

G represents a C₁₋₄ alkylene group;

J represents a C₁₋₄ alkylene group; and

the ring Ar represents a carbocyclic aryl group, a carbocyclic aryl group substituted with from 1 to 3 of substituents α or an aromatic heterocyclic group.

53. A compound according to Claim 36, in which:

R¹ represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α^1 ; and substituents α^1 are selected from alkyl groups having from 1 to 6 carbon atoms, haloalkyl groups having from 1 to 6 carbon atoms, and alkoxy groups having from 1 to 6 carbon atoms;

R² represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 halogen atoms;

A represents a carbonyl group;

B represents a single bond;

D represents an oxygen atom;

E represents a methylene, ethylene, dimethylmethylene, 1,1-dimethylethylene, 2,2-dimethylethylene, cyclopropane-1,1-diyl, cyclobutane-1,1-diyl, cyclopentane-1,1-diyl, cyclohexane-1,1-diyl, cyclopropane-1,1-diylmethyl, cyclobutane-1,1-diylmethyl, cyclopentane-1,1-diylmethyl or cyclohexane-1,1-diylmethyl group;

G represents a C₂₋₃ alkylene group;

J represents a methylene or ethylene group; and

the ring Ar represents a carbocyclic aryl group or a carbocyclic aryl group substituted with from 1 to 3 of substituents α .

54. The following compounds according to Claim 1:

1-[2-[5-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl]-4-phenylpiperidine-4-carboxamide;

1-{2-[5-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-{2-[5-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(2-pyridyl)piperidine-4-carboxamide;

1-{2-[5-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(3-pyridyl)piperidine-4-carboxamide;

1-{2-[5-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(4-pyridyl)piperidine-4-carboxamide;

1-{2-[5-(4-chlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-phenylpiperidine-4-carboxamide;

1-{2-[5-(4-chlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-{2-[5-(4-chlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(2-pyridyl)piperidine-4-carboxamide;

1-{2-[5-(4-chlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(3-pyridyl)piperidine-4-carboxamide;

1-{2-[5-(4-chlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(4-pyridyl)piperidine-4-carboxamide;

1-{2-[5-(4-fluorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-phenylpiperidine-4-carboxamide;

1-{2-[5-(4-fluorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-{2-[5-(4-fluorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(2-pyridyl)piperidine-4-carboxamide;

1-{2-[5-(4-fluorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(3-pyridyl)piperidine-4-carboxamide;

1-{2-[5-(4-fluorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}-4-(4-pyridyl)piperidine-4-carboxamide;

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-carboxamide;

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenyl-4-(pyrrolidin-1-ylcarbonyl)piperidine;

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-morpholinocarbonyl-4-phenylpiperidine;

1-{2-[2-(4-chlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-carboxamide;

1-{2-[2-(4-chlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-{2-[2-(4-fluorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-carboxamide;

1-{2-[2-(4-fluorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-{2-[2-(3,4-dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-carboxamide;

1-{2-[2-(3,4-dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl}-4-phenylpiperidine-4-(N,N-dimethylcarboxamide);

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzofuran-1(3H),4'-piperidine];

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine];

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[isobenzo[c]thiophene-1(3H),4'-piperidine]-2-oxide;

1-{2-[2-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[isoquinoline-1(2H),4'-piperidine]-3(4H)-one;

1-{2-[2-(3,4-dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl}spiro[isobenzofuran-1(3H),4'-piperidine];

1-{2-[2-(3,4-dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine];

1-{2-[2-(3,4-dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-2-oxide;

1-{2-[2-(3,4-dichlorophenyl)-4-(3-methoxybenzoyl)morpholin-2-yl]ethyl}spiro[isoquinoline-1(2H),4'-piperidine]-3(4H)-one;

1-{2-[(5R)-(3,4-dichlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(5R)-(4-chlorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(5R)-(4-fluorophenyl)-3-(3,4,5-trimethoxybenzoyl)oxazolidin-5-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(4-chlorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(4-fluorophenyl)-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(3,4-dichlorophenyl)-4-(3,4,5-trimethoxybenzoyl)hexahydro-1,4-oxazepin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(4-chlorophenyl)-4-(3,4,5-trimethoxybenzoyl)hexahydro-1,4-oxazepin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(4-fluorophenyl)-4-(3,4,5-trimethoxybenzoyl)hexahydro-1,4-oxazepin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(3,4-dichlorophenyl)-4-(3-isopropoxyphenylacetyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(4-chlorophenyl)-4-(3-isopropoxyphenylacetyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

1-{2-[(2R)-(4-fluorophenyl)-4-(3-isopropoxyphenylacetyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide; and

1-{2-[(2R)-(3,4-dichlorophenyl)-5,5-dimethyl-4-(3,4,5-trimethoxybenzoyl)morpholin-2-yl]ethyl}spiro[benzo[c]thiophene-1(3H),4'-piperidine]-(2S)-oxide;

and salts and esters thereof.

55. A composition for the treatment or prophylaxis of central nervous system diseases, neurodegenerative diseases, respiratory diseases, inflammatory diseases, allergies, hypersensitivity diseases, ophthalmological diseases, skin diseases, addictions, somatic diseases caused by stress, sympathetic reflex dystrophy, dysthymia, undesirable immune reactions, diseases relating to immunopotential, digestive diseases, emesis, urinary bladder functional diseases, eosinophilia, diseases caused by abnormal blood flow, and pain, which comprises an effective amount of an active compound of formula (I) or (Ia), or a pharmaceutically acceptable salt or ester thereof, as claimed in any one of Claims 1 to 54, in admixture with a pharmaceutically acceptable carrier or diluent.

56. The use of a compound of formula (I) or (Ia), or a pharmaceutically acceptable salt or ester thereof, as defined in any one of Claims 1 to 54, for the manufacture of a medicament for the treatment or prophylaxis of a disease or disorder selected from central nervous system diseases, neurodegenerative diseases, respiratory diseases, inflammatory diseases, allergies, hypersensitivity diseases, ophthalmological diseases, skin diseases, addictions, somatic diseases caused by stress, sympathetic reflex dystrophy, dysthymia, undesirable immune reactions, diseases relating to immunopotential, digestive diseases, emesis, urinary bladder functional diseases, eosinophilia, diseases caused by abnormal blood flow, and pain.



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EUROPEAN SEARCH REPORT

Application Number
EP 96 30 8711

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
P,D, X	WO 96 23787 A (SANOFI) 8 August 1996 * claim 1 *	1-56	C07D413/06 A61K31/44 C07D413/14 A61K31/535
Y	WO 95 28389 A (YAMANOUCI) 26 October 1995 * claim 1; examples 20-24 * & DATABASE WPI Week 9549 Derwent Publications Ltd., London, GB; AN 382750 & WO 95 28389 (YAMANOUCI) , 26 October 1995 * abstract *	1-56	C07D495/10 C07D471/10 C07D491/10 A61K31/55 C07D498/10
Y	EP 0 673 928 A (SANOFI) 27 September 1995 * claim 1 *	1-56	
D,Y	EP 0 630 887 A (ZENECA LTD) 28 December 1994 * claim 1 *	1-56	
D,A	WO 94 29309 A (MERCK & CO.) 22 December 1994 * claim 1 *	1-56	TECHNICAL FIELDS SEARCHED (Int.Cl.6) C07D A61K
D,Y	WO 94 26735 A (MERRELL DOW PHARMACEUTICALS) 24 November 1994 * claim 1 *	1-56	
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 5 March 1997	Examiner Gettins, M
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application I : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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